

VOL. 70

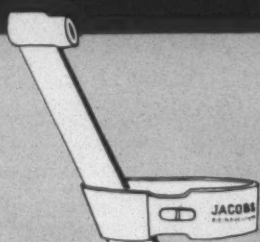
NO. 2

# textile

MARCH · 15 · 1946

# bulletin

*Miss Ferry*  
This issue commemorates the 35th anniversary of TEXTILE BULLETIN. It contains numerous special articles of value in determining the textile industry's present status.



## JACOBS

**Reinforced "Verybest"  
Lug Straps**

**"REINFORCED"**

— means more material  
for longer wear —  
in both the short  
and long lug strap.



**E. H. JACOBS MFG. CO.**

ESTABLISHED 1869

DANIELSON, CONN.

CHARLOTTE, N. C.





# STARCHES

**FOR ALL TEXTILE PURPOSES**

*Quality - Uniformity - Service*



**CLINTON INDUSTRIES, Inc.**  
**CLINTON, IOWA**



DEVELOPERS OF

**RCK**

ACCEPTED FROM NEW ENGLAND TO TEXAS  
AS THE **BEST FLYER FINISH**

PROOF/  
OVER 350,000 NOW IN USE

**UNEXCELLED IN  
WHITE GOODS MILLS**

The contrast between RCK's glossy, black finish and white roving enables operators to see at a glance whether ends are down.

**REDUCES  
EYE STRAIN**

The RCK finish lessens eye strain caused by the glitter of highly polished flyers.

**HIGHLY  
RUST-RESISTANT**

Many mills have been using RCK treated flyers for 4 years and find no sign of rust.

The list of mills now using RCK treated flyers reads like the roster of "Who's Who" in the textile industry. Big mills, little mills, old mills, new mills... all recognize the advantages of the black color, smoothness, and rust-resistance of RCK. One chain of mills is now using over 30,000 RCK treated flyers.

The kind of research that achieved the unmatched RCK finish gives the same superiority to Ideal's methods of rebuilding and balancing flyers and spindles.



**RESTORED TO  
STANDARD SIZE & FIT**

When flyers and spindles are rebuilt at the same time, worn barrels are swaged with Ideal's swaging machine to fit spindle tops perfectly... they run like new.

**PRECISION  
BALANCED**

at highest running speeds with

**IDEAL'S  
BALANCING MACHINE**

**ALSO  
REGULAR AND  
RAYON FINISHES**

for mills where bright finishes are preferable.

**OVER  
200 MILLS  
NOW USING  
RCK  
TREATED FLYERS**

Names on request.

*We Furnish Extra Flyers and Spindles Without Charge While Yours are Being Rebuilt*

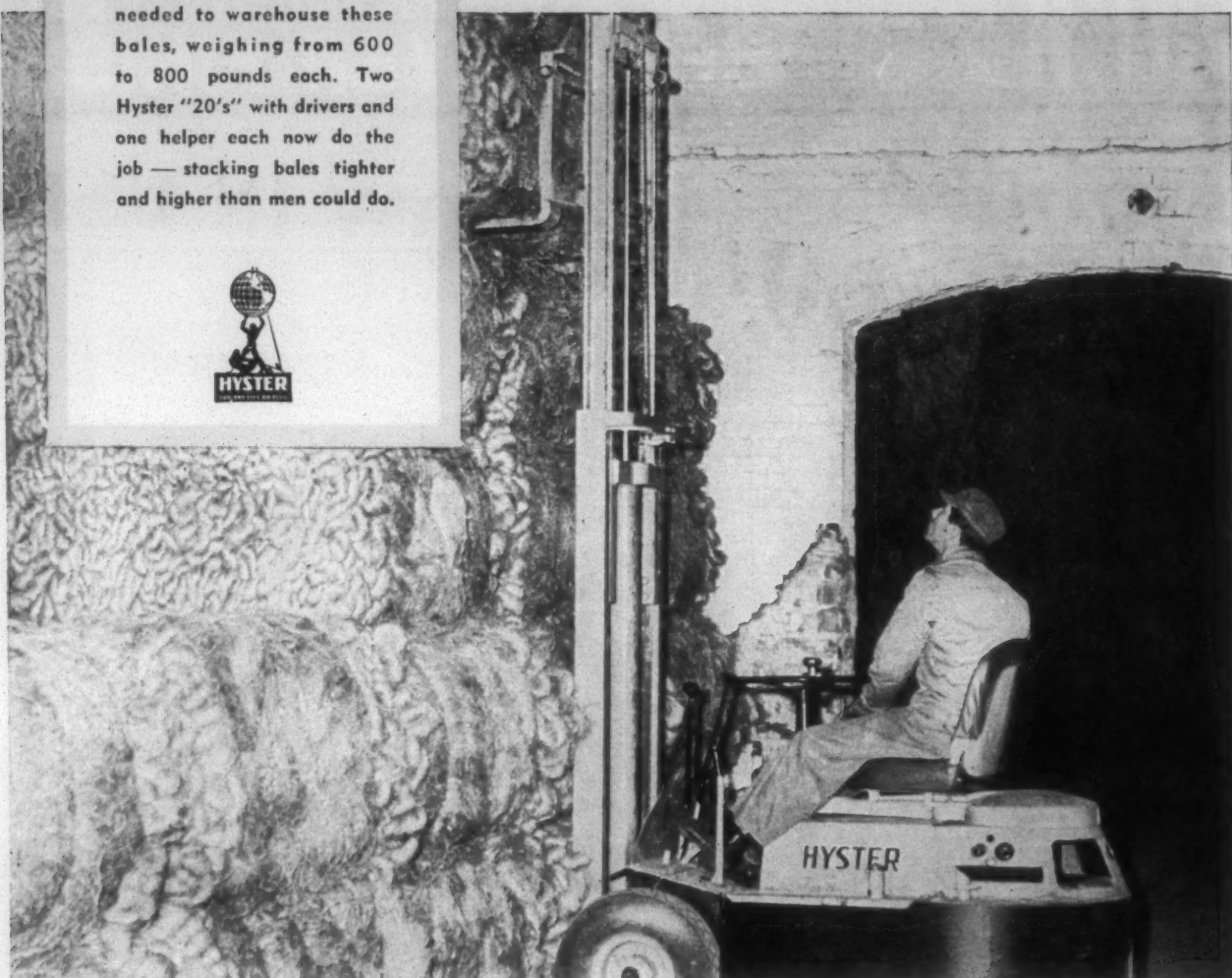
**IDEAL MACHINE SHOPS**

ROSLAND CITY, NORTH CAROLINA

**22ND YEAR OF CONTINUOUS SERVICE TO TEXTILE MILLS**



From 20 to 25 men once were needed to warehouse these bales, weighing from 600 to 800 pounds each. Two Hyster "20's" with drivers and one helper each now do the job — stacking bales tighter and higher than men could do.



## TEXTILE PLANT COST-CUTTER

### HYSTER INDUSTRIAL LIFT TRUCKS

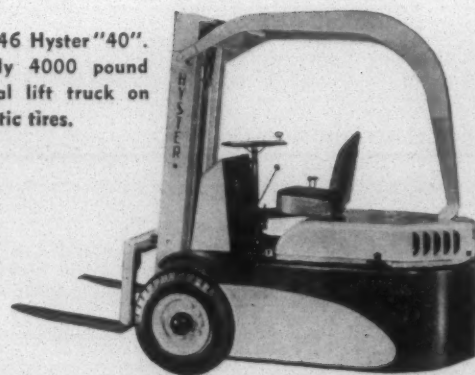
are cost-cutters on wheels. In and around a textile plant Hyster cuts materials handling costs by hoisting, transporting, stacking all kinds of loads quickly, efficiently, economically.

Textile men have learned from experience that Hyster industrial lift trucks earn back their original cost many times over by making important savings in time, manpower and money.

All Hyster models are equipped with pneumatic tires; gas powered; streamlined in design for ease of handling in tight places and in crowded aisles. Models from 2000 to 30,000 pounds capacity. Write for illustrated literature.

**HYSTER COMPANY**

New 1946 Hyster "40".  
The only 4000 pound  
industrial lift truck on  
pneumatic tires.



**L. S. TEAGUE  
EQUIPMENT COMPANY**

Established 1923

921 LYNCH BUILDING  
JACKSONVILLE 2, FLORIDA



# GET READY

Super High  
Speed Looms

Are you preparing proper operating conditions for  
your New Super High Speed Looms?

## Check List for Mill Executives

- ☐ Loom stoppage Tests on your Present Looms
- ☐ Humidity and Temperature Controls
- ☐ Slasher Operating Conditions—Particularly Automatic Controls
- ☐ Yarn Quality—Check Stoppage Test Report
- ☐ Uniform Filling Packages
- ☐ Training Loom Fixers

GET THE FACTS—To Point the way to Improved  
Methods and Increased Production

Let's Talk It Over

Series  
X

DRAPER CORPORATION

Hopedale Massachusetts





# CRAMERTON MILLS

INCORPORATED

*Fine Cottons,  
Yarns and Cloths*

CRAMERTON, NORTH CAROLINA



# Show or no show...

# HERE ARE HOUGHTON'S HEADLINERS!

Here are the developments you would have learned firsthand, had not the Southern Textile Show been postponed!

**NEW SYNTHETIC DETERGENTS**—"soapless soaps" which have excellent detergency, high sudsing action, and are many times as effective as old-time staple scouring agents.

**NEW WETTING AGENTS**—Concentrated surface-active agents, speedy in any type of solution, and excellent in money-value.

**NEW SOFTENING OILS**—Based on long research aimed at improving the feel and handle of fabrics.

**NEW FINISHING MATERIALS**—Rendering fabrics impervious to mildew, insects, water, etc. . . . War developments soon available for peace-time goods.

**NEW WARP SIZES**—For nylon, rayon and cotton . . . concentrated and warranted to improve weave-room or knitting efficiency.

A year ago we forecast these chemically conceived products. Today most of them have been released from war duty and are ready for test and use. E. F. HOUGHTON & CO., Charlotte and Philadelphia.

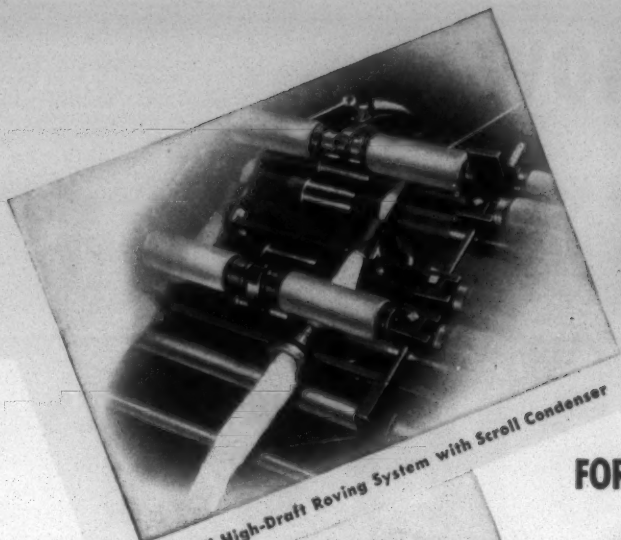
*Houghton Products*

**FOR THE TEXTILE INDUSTRY**

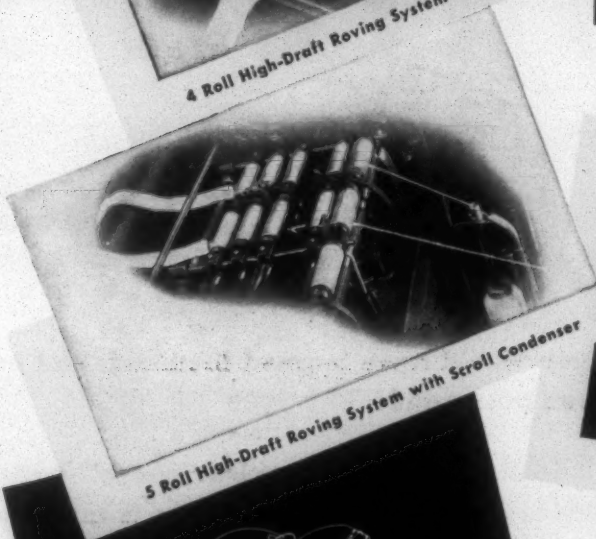


# H & B

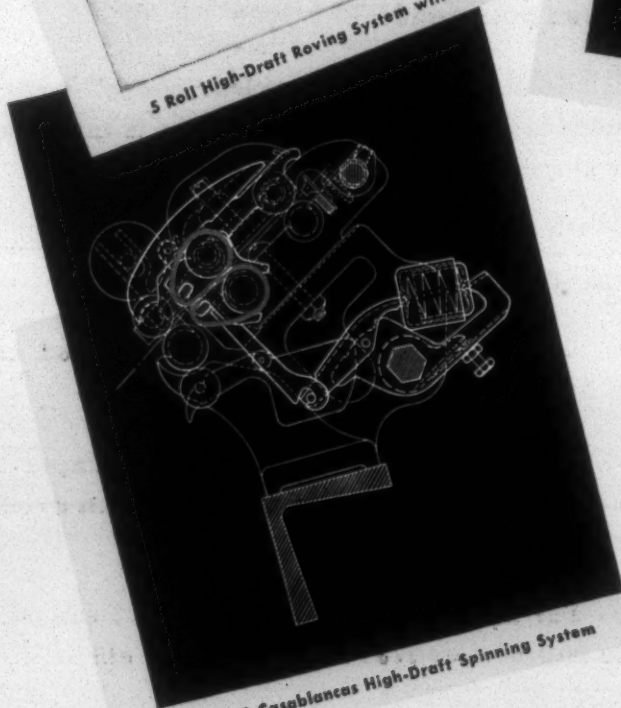
## FOR CARD ROOM & SPINNING MACHINERY



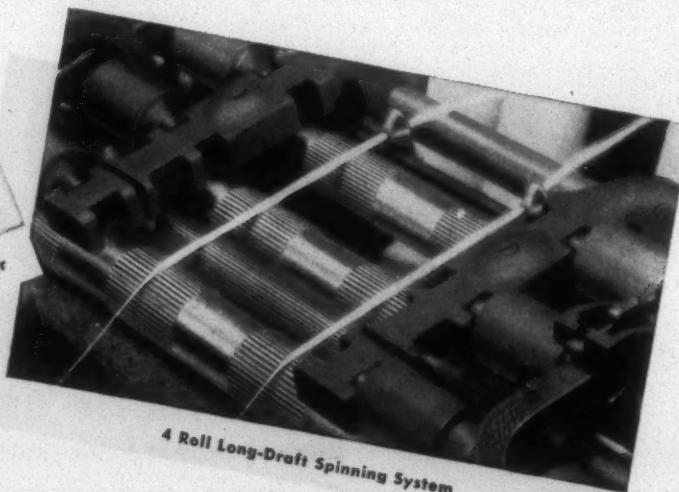
4 Roll High-Draft Roving System with Scroll Condenser



5 Roll High-Draft Roving System with Scroll Condenser



H & B Casablancas High-Draft Spinning System



4 Roll Long-Draft Spinning System

### YOU HAVE A CHOICE WHEN PURCHASING THIS EQUIPMENT

No two mills are exactly alike as to manufacturing methods or the type of stock they handle. Therefore the best spinning system for one may be unsatisfactory for another.

That is why H & B gives you a CHOICE of different types of high-draft equipment for card room and spinning room. Each has its own peculiar advantages in a given situation, but which is best for YOU is a matter for consultation with our engineers.

Tell us your problem and let us make recommendations, free of all obligations.

# H & B AMERICAN



# High-Draft Systems

## FACTS

### ABOUT H & B HIGH-DRAFT SYSTEMS

**4 ROLL HIGH-DRAFT ROVING SYSTEM** (with Scroll Condenser). For drafts up to 16 on staples up to 2". Rectangular serrated trumpet spreads the sliver for the first drafting zone and combs fibres to improve drafting and reduce fly. Patented weighting system facilitates cleaning because of streamlining and fewer parts, and provides positive control of weight distribution. Lubricating method saves oil and increases life of roller covering.

**5 ROLL HIGH-DRAFT ROVING SYSTEM** (with Scroll Condenser). For drafts up to 30. Is successfully drafting 60 grain sliver to 3.50 or 4 hank roving in one operation. Mechanical features are similar to those of the 4 Roll High-Draft System.

**PATENTED SCROLL CONDENSER.** This device, made of Bakelite to eliminate static, is used on both the 4 Roll and the 5 Roll High-Draft Roving Systems. It prevents flaring and spreading of the fibres by condensing them into a

compact sliver, without disturbing parallelization, and gives just enough false twist to allow better control in the drafting zone.

**4 ROLL LONG-DRAFT SPINNING SYSTEM.** Thousands of spindles equipped with this system testify to the fact that it fully meets quality and economy requirements in many instances. Since it has no belts, it is easy to clean, easy and economical to operate, and readily adjusted.

**H & B CASABLANCAS HIGH-DRAFT SPINNING SYSTEM.** For the mill that prefers a belt system there is nothing better than CASABLANCAS, since the system was designed by people who specialize exclusively in the high-draft field. New synthetic belts minimize the maintenance problem and important mechanical improvements enhance the yarn quality. These improvements include a new type cradle and automatic weighting. No lever screws, no adjusting, greater cleanliness, nothing on the roller beam, no weights or weight wires.

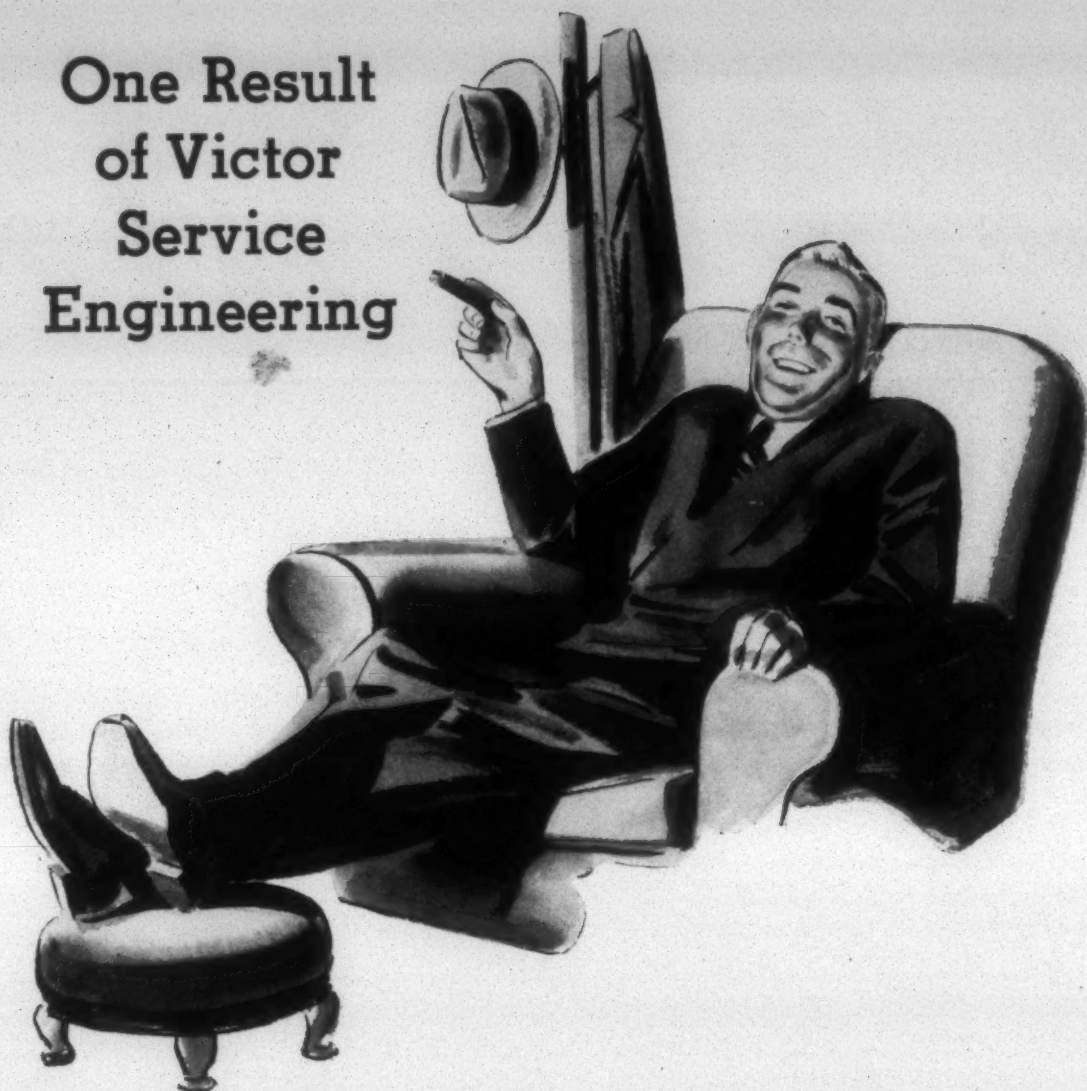
# N MACHINE CO.

**PAWTUCKET, R.I., U.S.A.**

BOSTON OFFICE: 161 Devonshire St.;  
ATLANTA OFFICE: 815 Citizens & Southern  
National Bank Bldg.; CHARLOTTE OFFICE:  
1201-3 Johnston Bldg.; CANADIAN REP.:  
Rudel Machinery Company, Ltd., Textile  
Division, Montreal and Toronto.



## One Result of Victor Service Engineering



That's you in the chair.

The picture represents one result the Victor Service Engineer is always seeking . . . more opportunity for you to relax. His primary purpose, of course, is to give you experienced, practical help in smoothing up your spinning and twisting — in helping you keep costs down and yarn quality up. When he is successful (and he is in a surprisingly high percentage of problems presented) the indirect result is more time to spare for you.

We know that, actually, very little of the time he saves you can be spent in the blissful ease pictured above. But it is extra time any mill man will treasure in these trying days, wherever you choose to apply it.

You'll find the Victor Service Engineer easy to talk to. He is thoroughly mill-trained, and he has sat in on thousands of spinning and twisting problems. He is familiar with all the quirks of the conventional fibers, and has up-to-the-

minute information on the new fibers and new blends that may be plaguing you. Talk over your troubles with him, traveler-wise. He'll call at your request. Write, wire, or phone the nearest Victor office.

*Keep  
a Step ahead  
with*

**VICTOR**  
**Ring**  
**Travelers**

**VICTOR RING TRAVELER COMPANY**

PROVIDENCE, R. I. . . . 20 Mathewson Street . . . Tel. DEXter 0737

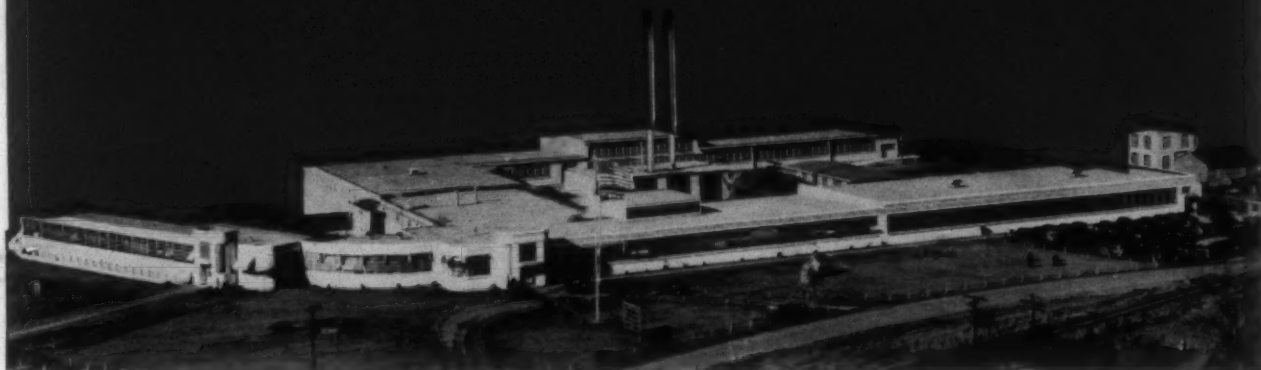
GASTONIA, N. C. . . . 173 W. Franklin Avenue . . . Tel. GASTonia 247



# HOW Faith in an Idea

## HELPS YOU PRODUCE FINER TEXTILES . . .

### LOWER PRODUCTION COSTS



OVER 10 YEARS AGO Dayton Rubber Scientists became obsessed with an idea. They believed they could compound natural and synthetic rubber for textile machinery parts . . . and that the performance of those parts would astonish the textile industry.

The plant shown here, located at Waynesville, N.C., symbolizes the correctness of their thinking. It was built to meet the demands for these rubber products just two years after they had been introduced commercially! Production facilities available in the home plant at Dayton, Ohio, were no longer adequate.

But the significance of this plant for the textile industry goes beyond what it symbolizes in brick and mortar.

It is the only plant in the world devoted exclusively to the manufacture of natural and synthetic rubber textile products . . . over 75 per cent of all the spindles in the United States are only 12 hours away by rail . . . it is surrounded by a number of outstanding textile engineering schools . . . these supplement our own extensive research departments . . . within the plant itself, product ideas are put right on the job, on spinning frames, looms, and test machines . . . unfailing sources of cold water are available, large quantities

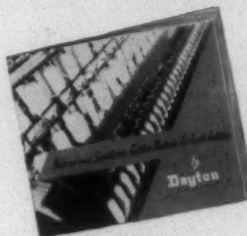
of which are needed in processing rubber . . . and finally cotton, which constitutes over 50 per cent of the raw material, is right at the doorstep.

These are all reasons why this plant can manufacture products that give remarkable performance . . . products that help produce finer textiles and lower production costs.

#### THE DAYTON RUBBER MANUFACTURING COMPANY

Factory: Waynesville, N. C. • Main Sales Office: Greenville, S. C.

#### Be SURE to Get Your Copy of This New Catalog!



This new Dayton Rubber Textile Catalog contains complete information on all of Dayton's natural and synthetic rubber products for textile machinery. To make sure you will get it write for a copy right now. Address your request to:

#### THE DAYTON RUBBER MANUFACTURING COMPANY

Woodside Building • Greenville, S. C.

# Dayton Rubber

THE MARK OF TECHNICAL EXCELLENCE IN NATURAL AND SYNTHETIC RUBBER



# SUPER-NARCO\*

## OPENING UP NEW DOORS TO *Spectacular Achievements* IN RAYON

During the war, SUPER-NARCO . . . North American's super rayon yarn . . . opened up a vast new approach to the practical application of rayon. For it proved its amazing strength, its resistance to friction and strain, in parachute cloths . . . in industrial textiles . . . in power-driven belting . . . in tire cords. ★ But SUPER-NARCO is more than just a super-strong rayon yarn. In addition, it has the same sleek beauty as the rayon yarns used in high-style fabrics for the fashion world. ★ This combination of strength and smartness promises important new fabric achievements . . . in garments where rayon, heretofore, was not suitable . . . in home furnishings . . . and in all textiles that must stand up under punishment.

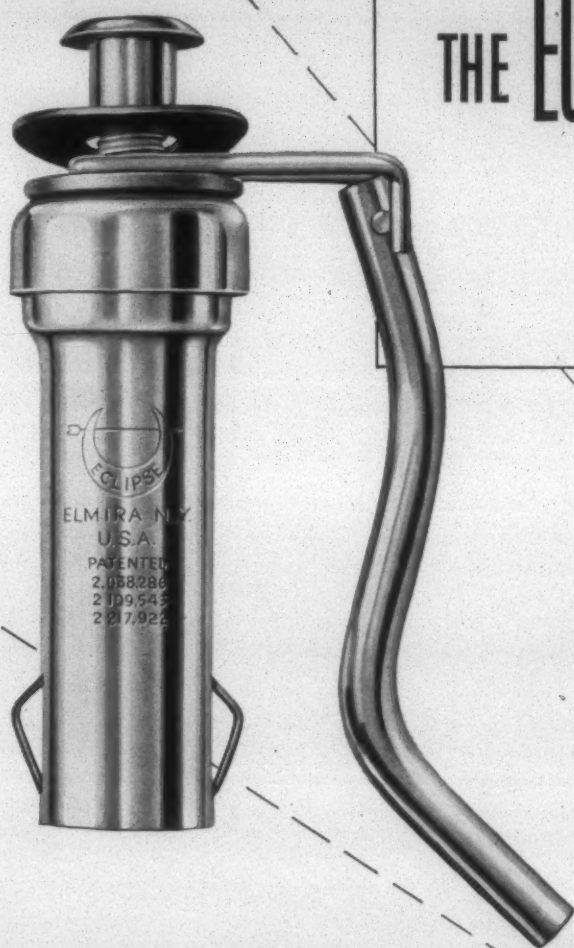
## NORTH AMERICAN

RAYON CORPORATION  
261 FIFTH AVENUE, NEW YORK 16, N. Y.

\* SUPER-NARCO is the registered trade-mark of the North American Rayon Corporation • 261 Fifth Avenue • New York



# Back Again !



## THE ECLIPSE BOBBIN HOLDER

WITH PREWAR QUALITY PLUS  
POSTWAR IMPROVEMENTS

Once again Eclipse\* Bobbin Holders are available in quantity for the textile trade. • The inherent advantages of design and workmanship that made Eclipse the favorite bobbin holder of leading textile plants are now combined with many new improvements. • If you are interested in modernizing your plant it will pay you to investigate the new Eclipse Bobbin Holder.

For complete information write or call  
ECLIPSE MACHINE DIVISION • ELMIRA, N. Y.

SOUTHERN REPRESENTATIVE  
J. D. LUTES • PHONE 3-5393 • P. O. BOX 1851 • CHARLOTTE, N. C.

## Compare these Features with your Present Equipment

1. Completely replaces wooden skewers.
2. Ball bearings minimize friction, resulting in uniform quality of roving.
3. Permits less twist. Tests indicate yarn of more even texture.
4. Creel boards easily cleaned. Overhead suspension leaves open creels. Blowers more effective.
5. Better spinning of spun rayon.
6. Easier creeling; less physical effort and fewer motions required.
7. Improved brake attachment prevents over-run and backlash.
8. Now cadmium plated—more rust resistant.
9. Time-tested product—holders in operation for over ten years.
10. Easy to install; practically no up-keep.



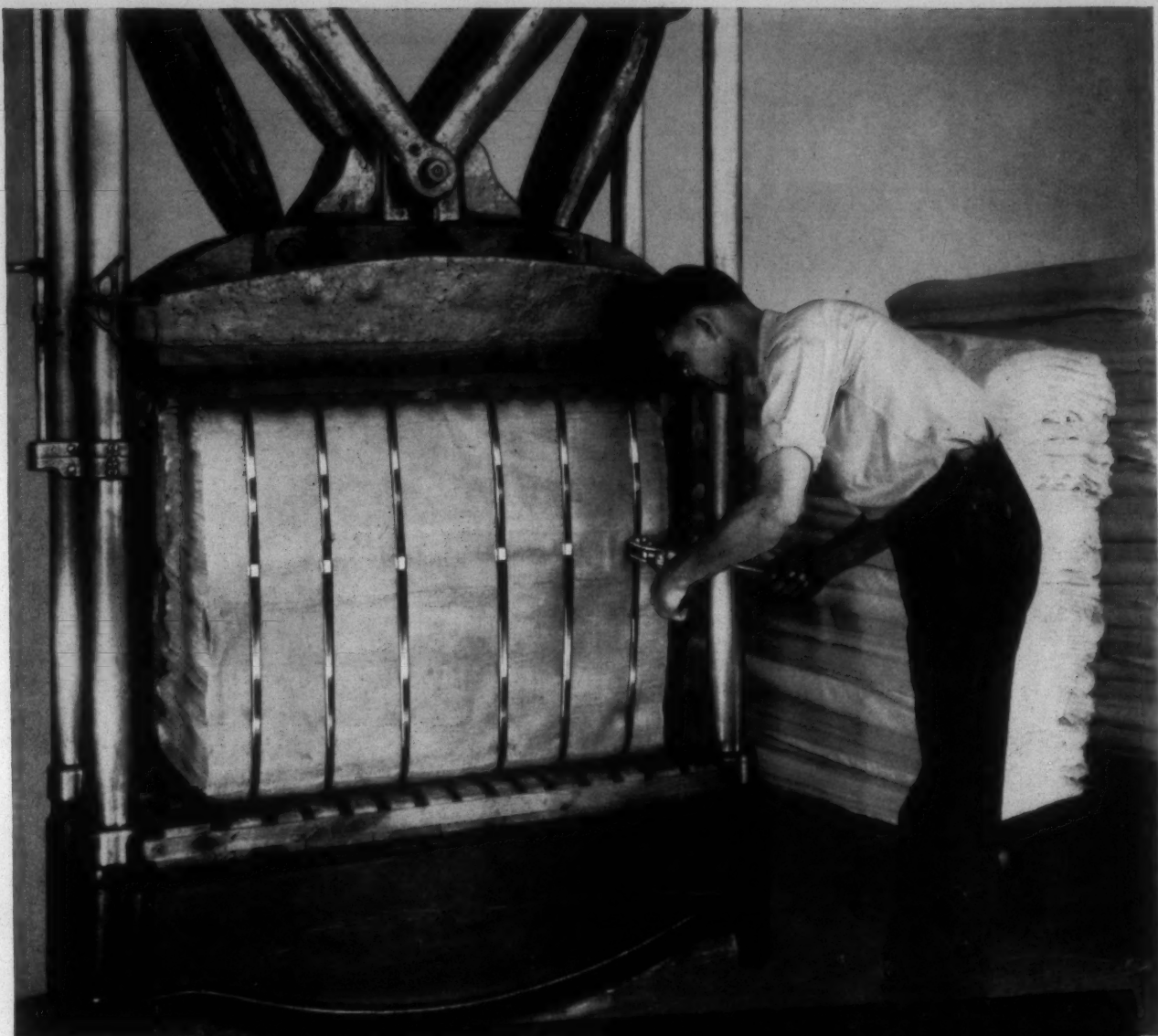
**ECLIPSE MACHINE DIVISION**

\*TRADE MARK

ELMIRA,  
NEW YORK







"BOUND TO GET THERE"

*Boxed. Bundled or Baled!*

...WITH *Acme Steelstrap*



REG. U. S. PAT. OFF.

No matter how your textile product goes, it will move more secure against everyday shipping hazards when banded with Acme Steelstrap.

You save, too, on warehousing space, shipping weight, dunnage, freight claims . . . and profits rise proportionately.

So, whether your textile shipments are single units, carloads of freight, or ships' cargoes . . . use Acme Steelstrap for boxing, bundling, or baling. It means the most efficient shipping pack.

NEW YORK 17

ATLANTA

CHICAGO 8

LOS ANGELES 11

**ACME STEEL COMPANY**

**ACME STEEL CO.  
CHICAGO**



**NOW!**

**AVAILABLE IN  
COMMERCIAL  
QUANTITIES**

# DU PONT ALBONE-130

TRADE MARK

**130-Volume HYDROGEN PEROXIDE**

Contains 35%  $H_2O_2$  by weight • Carboys, Drums and Tank Cars

## More bleaching oxygen for your money

... fewer containers to handle... less storage space... are among the desirable features offered by Du Pont's new high-strength Hydrogen Peroxide. This new product, called ALBONE-130, is as safe and convenient to handle as the familiar 100 volume.

Bleacheries using Hydrogen Peroxide in Du Pont Continuous Systems, and for wool and other textile processing, can now make a direct saving in the cost of the bleaching agent. This saving is entirely independent of any other economies which may be effected in the bleach-

ing process.

Let us tell you more about ALBONE-130—show you how easy it is to change your regular formulations for its use—how it can save money for you! Write or call our nearest district office for prompt attention. E. I. du Pont de Nemours & Co. (Inc.), Electrochemicals Department, Wilmington 98, Del.

DISTRICT AND SALES OFFICES: Baltimore, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Dallas,\* Detroit, El Monte, Calif., Houston,\* Kansas City,\* New Orleans,\* New York, Oklahoma City,\* Philadelphia, Pittsburgh, San Francisco, Tulsa,\* Wichita.\* Or write direct to: E. I. du Pont de Nemours & Co. (Inc.), Electrochemical Dept., Wilmington 98, Del.

\*Barada & Page Inc.

## DU PONT PEROXIDES



BETTER THINGS FOR BETTER LIVING  
... THROUGH CHEMISTRY



# The Ideal Roll Covering

## —PAST, PRESENT AND FUTURE

IN one hundred and seventy odd years since Arkwright first laid down the specifications for his water frame, hundreds of materials have been suggested and tested for covering top rolls, but none of them has possessed ALL of the ideal qualifications of good leather over an all-wool felt cloth.

GILLEATHER, the ideal roll covering always, throughout its useful life, draws evenly and smoothly, without any variation, and positively without any adverse results to either raw material fibres or the strand. It is totally unaffected by temperature changes, humidity and

oil. No material, yet discovered, except leather — especially GILLEATHER — can rightfully claim all these qualities.

No wonder that the following fact has been, is now and will be acknowledged by the best cotton spinners the world over that nothing has ever been discovered that will produce as consistently good yarn as a good leather-covered roll.

GILL LEATHER COMPANY, Salem, Mass.

#### TEXTILE REPRESENTATIVES

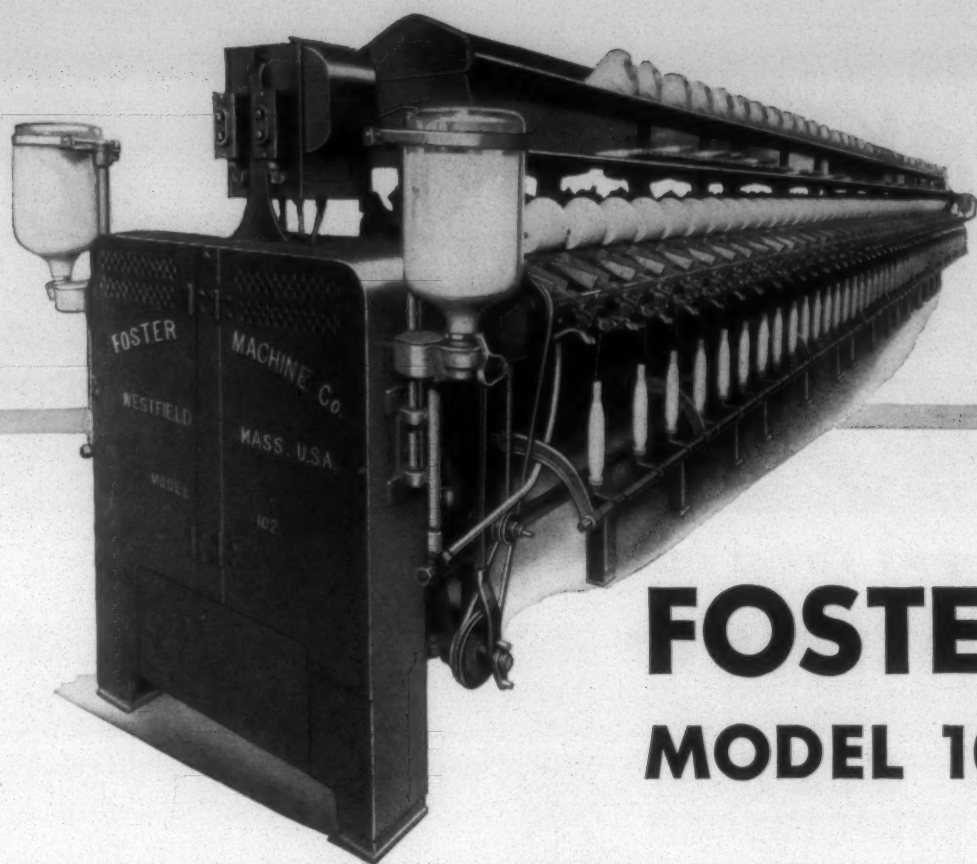
Gastonia, N. C., Mrs. W. C. HAMNER	Griffin, Ga. . . . . B. C. FLOWDEN
Greenville, S. C. . . . . W. J. MOORE	Utica, N. Y. . . . . WILLIAM A. ROBERTS
Greenville, S. C. . . . . RALPH GOSSETT	Dallas, Texas, RUSSELL A. SINGLETON



**GILLEATHER**

Where quality is equally important with production **GILLEATHER** Roller and Apron Leathers are the choice.





## FOSTER MODEL 102

### It Can CHANGE with Your Winding Requirements

No one can foresee today what his winding requirements will be tomorrow. However, he CAN obtain winding equipment which is FLEXIBLE enough to CHANGE with winding requirements, — the FOSTER MODEL 102.

This machine will wind any type or count of staple yarn. It can be readily adjusted to produce any cone taper commonly used and any angle of wind from 9° to 18°. It can also be equipped to wind knitting cones, warping cones, parallel tubes, dye packages ( $\frac{5}{8}$ " or large diameter tubes), or short traverse cheeses ( $3\frac{1}{4}$ " or  $2\frac{1}{4}$ " traverse). It will wind dyed yarn even when damp (no jumping out of guides), also conditioned yarn (the machine is frequently equipped with a conditioning attachment). Yarn traverses up to 7" can be supplied.

Users of the Foster Model 102 also gain in winding efficiency, for this machine will wind twice as much yarn, at  $\frac{1}{3}$  less cost, as will obsolete machines.

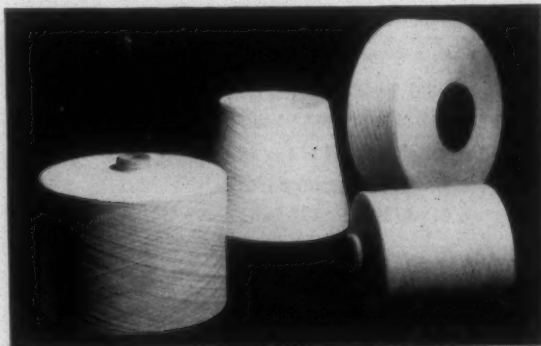
*Bulletin A-95 on request*

#### KNITTERS

##### Specify FOSTER - the ORIGINAL Open Wind Cone

By so doing you can also specify the taper, the angle of wind and the cone density which is best suited to your knitting requirements.

Modern slub catching attachment and other special devices on the Foster Model 102 assure a clean, uniformly high quality yarn and cones that are free of ribbon wind.



#### FOSTER MACHINE COMPANY

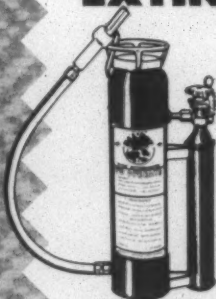
Westfield, Mass., U.S.A.

SOUTHERN OFFICE, JOHNSTON BLDG., CHARLOTTE, N. C.;  
CANADIAN REP., ROSS WHITEHEAD & CO., LTD., UNIVERSITY  
TOWER BLDG., 660 STE. CATHERINE ST., W., MONTREAL, QUE.





**—put them out  
WITH  
"ALL-OUT"  
DRY/CHEMICAL\*  
FIRE  
EXTINGUISHER**



.. This modern  
protection  
safeguards  
life — property —  
earnings!

Guard against known and hidden fire hazards — install "ALL-OUT" Dry Chemical Fire Extinguishers in all hazardous areas. "ALL-OUT" Dry Chemical is different . . . quick-acting . . . does not harm persons, fabrics, looms, or other machinery. Effective against gasoline, solvent and oil flames, "ALL-OUT" is approved for fires of electrical origin — motors, generators, oil switches, etc. A non-conductor of electricity, flame-suffocating "ALL-OUT" Dry Chemical prevents injury to operator or equipment by avoiding short circuiting of live power lines. Specify "ALL-OUT" for all out protection in your mill, warehouse, solvent storage room, powerhouse, and garage.

- ★ LIGHT WEIGHT—Easy to operate
- ★ PROTECTS OPERATOR from radiant heat
- ★ NON-CONDUCTOR of electricity
- ★ HARMLESS to personnel, fabrics equipment
- ★ NON-ABRASIVE—NON-TOXIC

Write today for complete data on the "ALL-OUT" Dry Chemical Fire Extinguisher.



**"ALL-OUT" FIRE EXTINGUISHER DIV.  
PRESSURELUME, INC., MANUFACTURERS**

DEPT. 8, RIVERSIDE DRIVE AT 134th ST., NEW YORK 33, N. Y.



**"FROM COTTON TO CUTTER"**

*The Reeves Fabric Group Includes:*

Reeves Army Twill • Reeveking Gabardine  
Glengarrie Poplin • Byrd Cloth • Marine  
Herringbone • Mountain Cloth • Warrior Twill

**J**UST as they have come through the toughest war demands ever made on fabrics—this same Reeves Fabric Group will come through for your peacetime demands. And the famous "From Cotton to Cutter" supervision will still be your guarantee of perfection every yard of the way.

In the peacetime world of progress and achievement, active Americans will want their work clothes, sport and rainwear to look just as well as they wear. Because experience has made them fabric conscious, they'll demand the established excellence of the Reeves Fabric Group. So plan today to use the fabrics with the distinguished service record.



Mills Mill, Greenville, S. C., and Woodruff, S. C.  
Fairforest Finishing Co., Spartanburg, S. C.

*Manufacturers of Reeves Fabrics*

**Mills Mill  
Fairforest Finishing Co.**

**REEVES BROTHERS, Inc.**  
54 Worth Street, New York 13, N. Y.





## A New Finish for Sheer Fabrics

Here is a permanent, stabilizing new finish for sheer fabrics that opens an entire new sales outlook for the textile industry. SHEERSET†, a melamine resin finish, assures lasting crispness and color stabilization when applied to fine rayon or cotton fabrics.

SHEERSET Resin can be applied to a wide variety of sheer textile fabrics such as organdy, marquisette, voile, ninon, dotted swiss, lawn, Bemberg sheers, and nets. Fabrics retain their original firm texture, show no appreciable shrinkage, fading, or change in shape even after repeated laundering or dry cleaning.

SHEERSET Resin offers unique merchandising advantages to the sheer fabrics manufacturer, finisher, and retailer. Our technical service staff will be glad to advise you on the use of SHEERSET Resin.

\* Registered U. S. Patent Office.

† Trade-mark of American Cyanamid Company.

### AMERICAN CYANAMID COMPANY TEXTILE RESIN DEPARTMENT

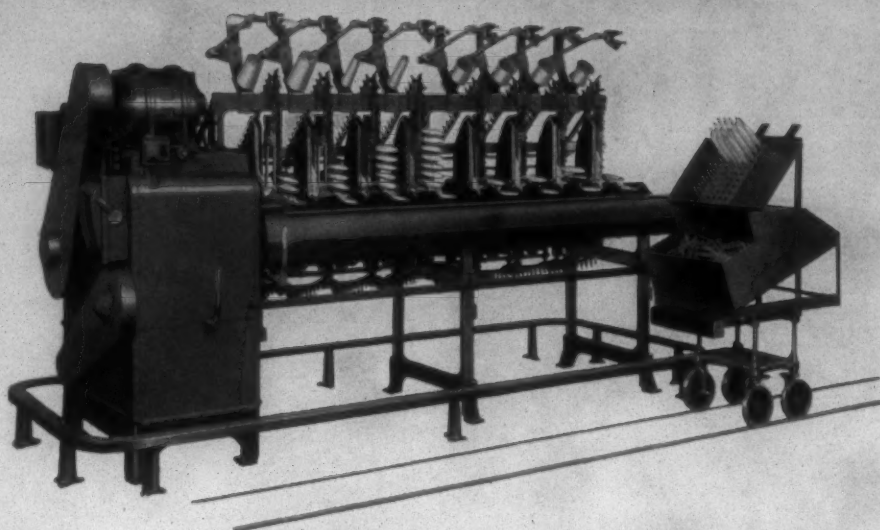
BOUND BROOK, NEW JERSEY

New York • Chicago • Boston • Philadelphia • Charlotte • Providence

LANASET\* RESIN • AEROSSET† RESIN • SHEERSET† RESIN • LACET† RESIN



## AUTOMATIC BOBBIN WINDER

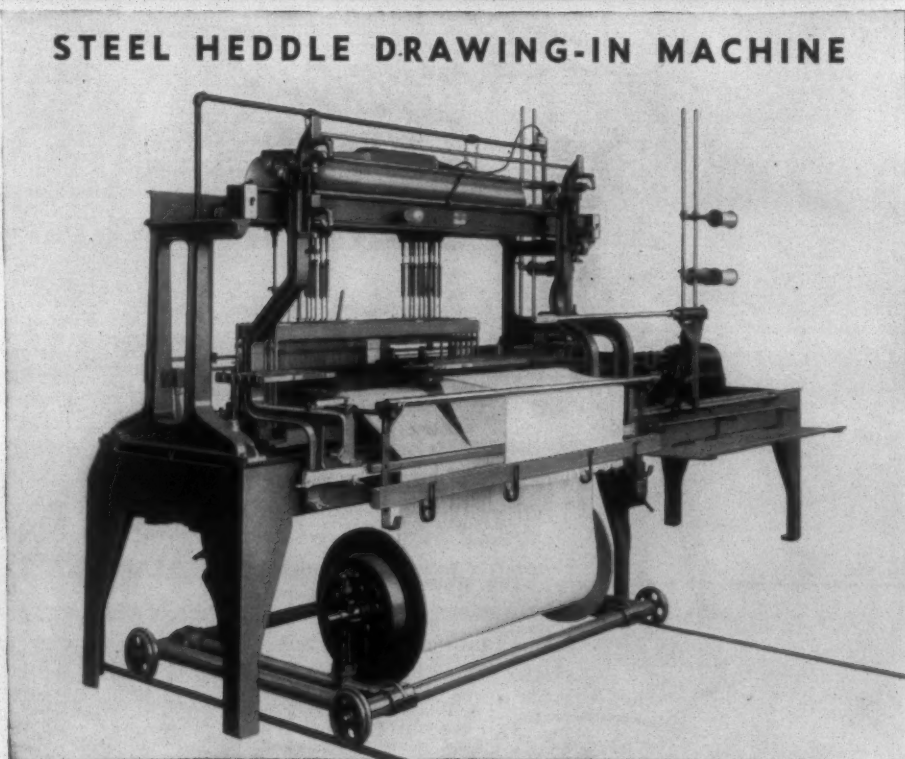


The operator puts empty bobbins in the machine and yarn packages on the top of the frame, removes full bobbins from the delivery chains. All the operations are fully automatic. Two types of this machine are available — one for synthetics with chain delivery and one for cotton with automatic doffing.

## BARBER-COLMAN MACHINES THAT WOULD HAVE BEEN AT THE TEXTILE SHOW

This machine provides greater capacity to handle high sley warps and fancy patterns characteristic of modern goods. It is made in several sizes and capacities up to a maximum of 120" reed width to draw up to 24 harnesses, 8 banks of drop wires, and reed. It can be used on rayon, cotton, or wool.

## STEEL HEDDLE DRAWING-IN MACHINE



AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

# BARBER-COLMAN COMPANY

ROCKFORD • ILLINOIS • U. S. A.

FRAMINGHAM, MASS., U. S. A.

GREENVILLE, S. C., U. S. A.

MANCHESTER, ENGLAND





Appleton Company



*a top name in flannels...uses*

## LAWRENCE SPINNA CALF

**—the top name in roll covering**

When you can be sure of a roll covering that has the right frictional surface required for smooth, sure drafting... is non-sweating... and will hold its shape and "body" despite the constant pressure and friction of the yarn... there's no need to experiment.

Many "big name" mills insist that nothing takes the place of calfskin for fine spinning—and Lively Spinna Calf has become, through the years, the most generally used calfskin. Tell your roll coverer you want Spinna.

A. C. Lawrence Leather Company, Peabody, Mass.

Manufacturers of Lawrence Calfskins — 1st choice

for aprons.

H. H. Hersey,



Represented by  
Greenville, S. C.

**EVERY YEAR MORE PEOPLE DECIDE LEATHER IS BEST**



# **Victor Monaghan Company**

**Greenville, South Carolina**



Selling Agents

**J. P. Stevens & Company, Inc.**

44 LEONARD STREET • • • NEW YORK, N. Y.





## Why You Are in No Immediate Danger of THIS!

Unfortunately, loom-production isn't simply a matter of loading a bunch of slot-machines (or warehouses) with all the different types of C&K Looms, so that all those who want them can step up and fill all their needs at the same time . . . *right now!* And here are some very good reasons:

The Loom Works is in the process of training many new men to high personal productivity. That isn't done in a day, *by anyone*.

And the Loom Works, for all its size and diversification of manufacturing, still has to depend on outside suppliers for certain basic essentials like bearings, motors, and other products. And those suppliers, in turn, are dependent on conditions

outside *their* control.

These simple, inescapable facts are often overlooked by all of us, in the urgency and impatience caused by conditions of unremitting daily pressure which grows greater rather than less.

*But, nevertheless, be assured of this:* Loom production, week by week and month by month, *is steadily stepping up.* And as new men, methods and materials fit more and more smoothly into the groove, the increasing momentum of output will bring your own delivery date up *fast.* In fact, you can have every confidence that the thousands of people at C&K are working day and night toward filling *your* order at the earliest possible moment.

## Crompton & Knowles Loom Works

WORCESTER 1, MASSACHUSETTS, U. S. A.  
PHILADELPHIA, PA. • CHARLOTTE, N. C. • ALBANY, N. Y.  
Crompton & Knowles Loom Works & Supply Co.  
Pawtucket, R. I.

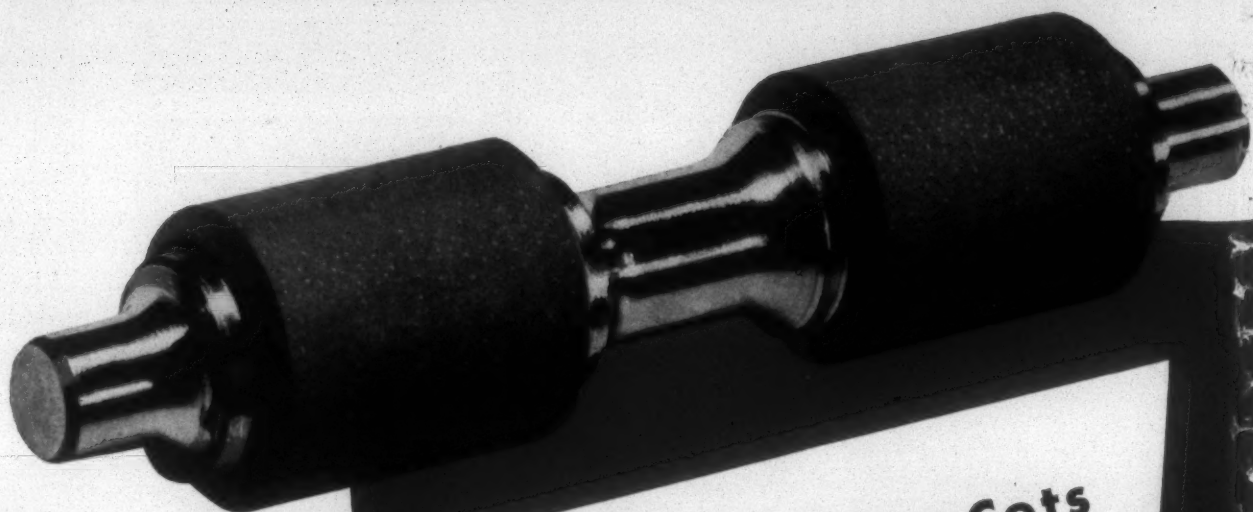


between Today's Knowledge...  
and Tomorrow's Looms



# YOU GET BETTER

*because this improved*



## 8 advantages of Accotex Cots

### We were planning to greet you at the Textile Exposition

We're sorry we won't have the pleasure of seeing you at the Southern Textile Exposition this year. If you have any roll covering problems that you were planning to discuss with us at the show, phone or write. We'll be glad to call and talk them over with you at your mill.

1. **LONG SERVICE**—Accotex Cots are tough. And they can be rebuffed 5 or 6 times.
2. **GOOD DRAFTING**—Accotex Cots retain their excellent grip, because their cork-and-synthetic composition resists slicking.
3. **REDUCED EYEBROWING**—The resistance to slicking minimizes eyebrowing.
4. **REDUCED LAPPING**—Accotex Cots have little affinity for textile fibers and are non-sweating.
5. **GOOD START-UP**—Accotex Cots are non-thermoplastic and resist flattening.
6. **SOLVENT RESISTANCE**—Accotex Cots are not affected by oil, water, dyes, or any of the commonly used textile solvents.
7. **SEAMLESS CONSTRUCTION**—Accotex Cots have no seams—can't break open in service.
8. **QUICK ASSEMBLY**—Accotex Cots are ready glued for easier, quicker assembly.



# DRAFTING

## synthetic cot resists slicking

Made of synthetic rubber *and* cork, Armstrong's Accotex Cots retain their superior grip longer than any "straight" synthetic roll covering. The cork content gives Accotex Cots unusually high resistance to slicking. And this exclusive long-lasting grip means you get better drafting . . . produce higher quality yarn . . . when you run on these improved roll coverings.

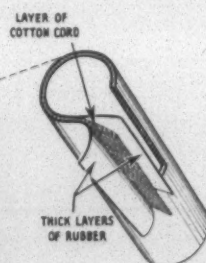
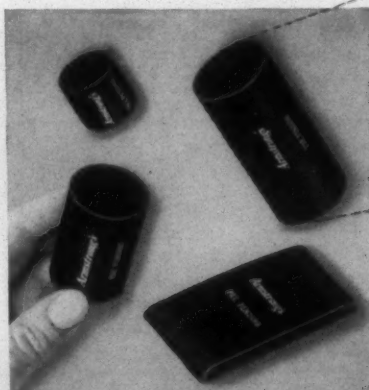
Better drafting is only one of the eight important spinning advantages offered by Accotex Cots. Check over the list at the left and you'll see why more and more mills are changing to Accotex Cots . . . why, according to recent surveys, they are now serving more spindles than any other synthetic cot.

Your Armstrong representative will be glad to help you arrange tests of these superior roll coverings on your own frames. Ask him for samples, prices, and complete information. Or write to Armstrong Cork Company, Textile Products Department, 8203 Arch St., Lancaster, Pennsylvania.



### Also by the makers of Accotex Cots . . . the Accotex Apron

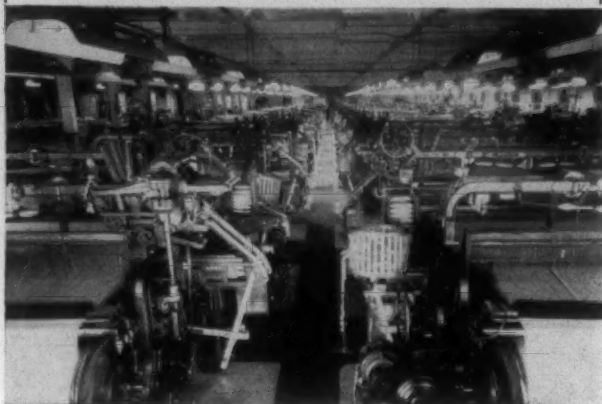
The Accotex Long Draft Apron, a result of the same specialized research and technical skill that produced Accotex Cots, gives you more production, cleaner-running work, reduced lapping, and better grip. These production advantages are due to their special seamless construction shown at right—a sturdy cord interliner sandwiched between two heavy layers of synthetic rubber.



CORK COTS • ACCOTEX APRONS



**THE REFLECTOR IS THE BACKBONE  
OF ANY LIGHTING SYSTEM...**

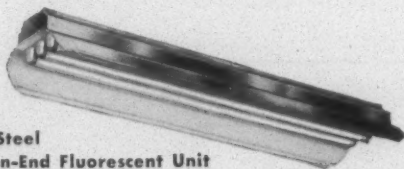


*Skilled Lighting*  
**Means Light that is RIGHT**

The elimination of eye strain, glare, and shadows is just as important as a high level of illumination. Skilled Lighting, the Wheeler way, puts the right amount of light in the right places to achieve four benefits that have an important bearing on profits: greater manual speed, increased accuracy, less spoiled work, and improved worker morale.

The broad line of Wheeler Reflectors is the backbone of Skilled Lighting. It offers the right fluorescent or incandescent reflector for every area in your mill. All are built of heavy gauge metal for long, hard service.

Look in the Wheeler Catalogs for reflectors that show the results of Wheeler's advanced engineering based on 65 years of manufacturing experience. Wheeler Reflector Company, 275 Congress St., Boston 10, Mass. Representatives in principal cities.



**All-Steel  
Open-End Fluorescent Unit**

Available for two or three 40-watt, or two 100-watt lamps. Broad wiring channel with accessible, enclosed ballast. Can be mounted from chain or conduit, individually or in continuous runs.

*Distributed Exclusively Through Electrical Wholesalers*

***Wheeler* Skilled Lighting REFLECTORS**

Made by Specialists in Lighting Equipment Since 1881

**Randolph Mills**

INCORPORATED

Manufacturers of

**COTTON  
FLANNELS**

FRANKLINVILLE, N. C.

**IMPROVED BLEND  
IDENTIFICATION FOR**

*Synthetics*

Leading Southern and New England textile manufacturers are taking no chances on the important matter of blend identification. They're using equipment manufactured and sold by Frank F. Fuller—the most efficient process now available for applying fugitive tints.

Is your own equipment adequate for the abundance of synthetics that is on the way? A Fuller installation will solve your blend identification problems with the proved advantages of economy, versatility and modern design. Write for detailed information.

**FRANK F. FULLER**

*Textile Spraying Equipment*

831 Bailey Avenue, Elizabeth 3, New Jersey



**SANDOZ PRESENTS** *The color achievement of the month*



## *Confident Color* **BY MIRON WOOLENS**

The success of this clever round-the-clock suit depends greatly upon its color striking the fancy of the women who see it as they shop.

All parties concerned can have confidence in the success of this suit, due among other things to the fact that the Bell Company, the weaver, counts Sandoz among its suppliers and relies upon Sandoz for top quality in dyes.

Bell—and other leaders in fabric—know that *Sandoz thinks ahead with*

*textiles*, and continually brings out colors that are both fashionably and technically correct.

For example — Sandoz offers a full range of Acid colors... level dyeing, well suited for piece dyeing, and extremely fast to light and wear. These include Xylene Light Yellow 2GP (Pat.)... patented Alizarine Light Blue 4GL and Violet 2RC or Azo Rubinoles 3GP (Pat.)... exclusive Sandoz developments.

For acid, chrome or direct dyes... or auxiliary chemicals... for both natural and synthetic fibres... be guided by the successful "color achievements" you have been seeing in these Sandoz advertisements. Sandoz application laboratories are located in New York, Boston, Philadelphia, Los Angeles, Charlotte, Toronto, where stocks in wide range are carried. Other branches are in Chicago, Paterson and Providence.

SANDOZ CHEMICAL WORKS, INC., 61 VAN DAM STREET, NEW YORK 13, N. Y.

**S A D**

*thinks ahead with textiles*

**S**

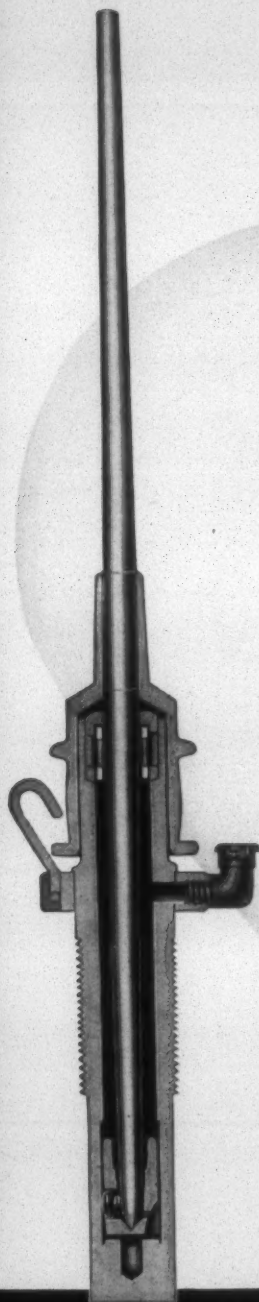


*These Will Help You*



**SPIN A GOOD YARN!**

# Marquette ROLLER BEARING SPINDLES



**MARQUETTE FEATURES THAT ADD UP  
TO BETTER SPINDLE PERFORMANCE**

- 1** **PRECISION ROLLER BEARINGS** of extra capacity carry the radial load smoothly and with a minimum of power consumption.
- 2** **STEEL BOLSTER CASE** is extra long, resulting in a wide separation of the bolster and footstep bearings. This provides for a large oil reservoir and contributes to smoother performance.
- 3** **FULL FLOATING FOOTSTEP BEARING** supports all of the weight and acts as a vibration dampener; an unbalanced load can generally center or adjust itself. This bearing is hardened and ground and has a lapped seat.

*The* **Marquette** METAL PRODUCTS CO.  
CLEVELAND 10, OHIO

*Manufacturers of:* HYDRAULIC AND ELECTRIC WINDSHIELD WIPERS FOR AIRCRAFT  
HYDRAULIC GOVERNORS FOR DIESEL ENGINES • ROLLER BEARING TEXTILE SPINDLES • FUEL OIL PUMPS  
AIR COMPRESSORS • PRECISION PARTS AND ASSEMBLIES

Southern Representative: Byrd Miller, Woodside Bldg., Greenville, S. C.



*Answers to your toughest problems*

## **JACQUES WOLF SYNTHETIC DETERGENTS**

**for every textile purpose**

✓ **ORATOL S POWDER**  
(Sulphated Amide)

For print wash, boil-off or any dyehouse job requiring good cleansing and emulsifying ability with lasting foam.

✓ **SELLOGEN A S CONC**  
(Aryl Alkyl Sulfonate)

For instantaneous wetting.

✓ **ORATOL L-48**  
(Sulfonated Amide Compound)

Very effective detergent paste; greater detergency than soap and priced to give more economical results.

✓ **SELLOGEN C**  
(Higher Alcohol-Ester Compound)

High wetting and detergent properties; not affected by hard water or metallic salts; for scouring, dyeing, finishing. Also for emulsifying in other processes.

✓ **EMULSIFIERS**  
L-32, L-34, L-45  
(Non-ionic higher fatty acid ester)

Emulsifiers in different concentrations adjusted for various purposes.



## **JACQUES WOLF & CO.**

*Chemicals*

PASSAIC, N. J.

OTHER PLANTS: CARLSTADT, N. J. • LOS ANGELES, CALIF.

WAREHOUSES: Providence, R. I., Philadelphia, Pa., Utica, N. Y., Chicago, Ill., Greenville, S. C., Chattanooga, Knoxville, Tenn.





## CONTROLLED FEEDING OF PEROXIDE IS EASY

Whether you use the kier, cold, machine, package or continuous steam method of bleaching, Becco hydrogen peroxide is very easy to handle. Shipped in drums or tank cars, it is pumped directly to the point of use. The actual feeding of the peroxide is automatic and fully controlled through use of proportioning pumps. The use of Becco hydrogen peroxide thus reduces labor as well as hazards.

As the result of many years of specialized

bleaching experience, Becco's engineers and chemists are qualified to give valuable advice on bleaching. Why not ask them to advise what system is most suitable for your operations, whether it be cotton, wool, knit goods, rayon or other natural and synthetic fibres. They will tell you, too, at what stage of production the bleaching should be done or is most suitable. This bleaching "know-how" can now be yours, free. Write to:



**BECCO SALES CORPORATION**

AGENTS FOR BUFFALO ELECTRO-CHEMICAL CO., INC.

125 Delaware Avenue, Buffalo, N. Y.

New York      Boston      Philadelphia      Chicago      Cincinnati



# Dunean Mills

GREENVILLE, SOUTH CAROLINA



**Rayon  
Fabrics**

Selling Agents - **J. P. STEVENS & COMPANY, INC.**  
44 Leonard Street & 1410 Broadway - NEW YORK, N. Y.



# *Rosemary Manufacturing Co.*

- *Cotton Damask*
- *Napkins*
- *Upholsteries  
and Ticking*

*Roanoke Rapids, North Carolina*

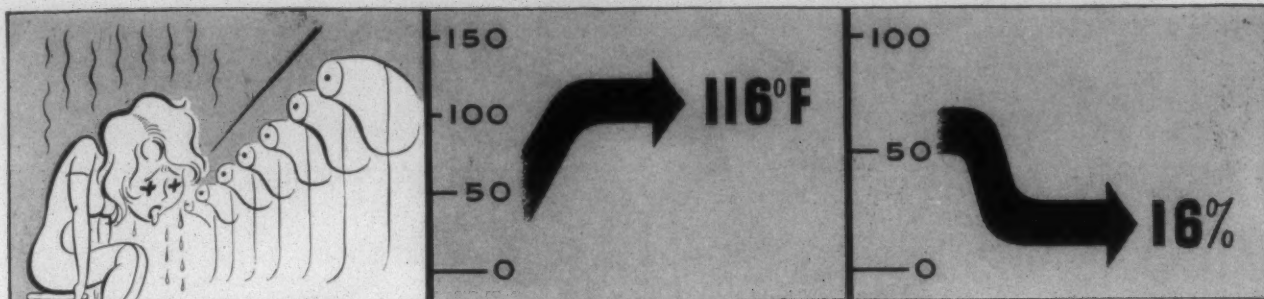


# 3 STEPS TOWARD ALL-TIME-HIGH OUTPUT

(TYPICAL MILL EXPERIENCE)

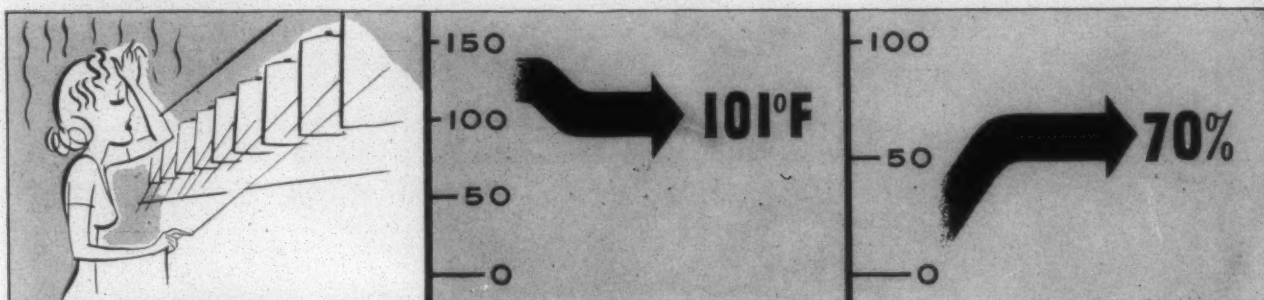
TEMPERATURES

HUMIDITY



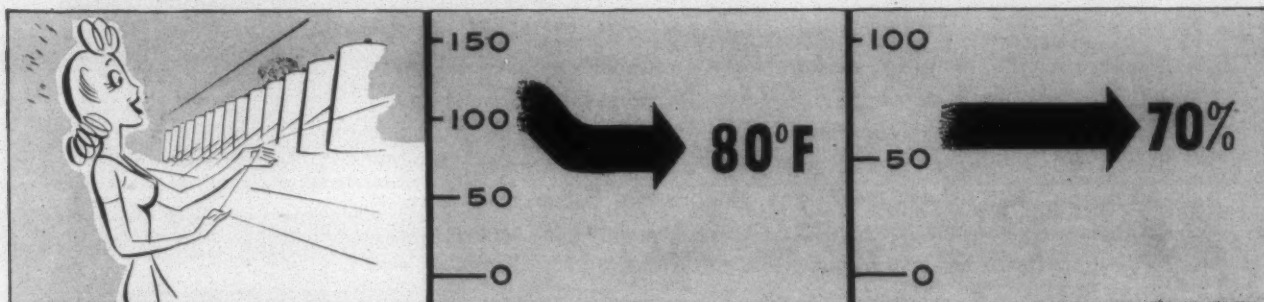
**1. NO HUMIDIFICATION — NO TEMPERATURE CONTROL** With temperature *high* and humidity *low* the work quality and worker efficiency were poor.

**RESULT:**  
Poor Quality. Low Production.



**2. WITH ADEQUATE, CONTROLLED HUMIDITY** An AMCO Humidification System raised humidity from 16% to 70% and kept it there. The quality improved, but the worker still tired easily with temperature at 101° F.

**RESULT:**  
Improved Quality.  
Increased Production.



**3. WITH HUMIDITY AND TEMPERATURE BOTH CONTROLLED** Addition of an AMCO Evaporative Cooling System held humidity to the ideal 70%, also dropped temperature to 80° F.

**RESULT:**  
Top Quality. Top Production.

In the Amco Evaporative Cooling System, relative humidity is raised by introducing atomized water spray and frictional heat is absorbed by evaporation of the moisture, made practical by carefully controlled air-flow.

This typical experience, with outside temperature 90° F. and relative humidity 33%, demonstrates clearly that good machines and willing workers are

not enough. Reducing excessive temperature and holding humidity at the point best suited to fibre and process and the workers' comfort are important in a dollars and cents way.

An AMCO engineer can tell you how you can modernize your plant, by installing this automatic temperature and humidity control, to get the speeds and output needed to meet competition.

## AMCO EVAPORATIVE COOLING SYSTEMS

AMERICAN MOISTENING COMPANY, PROVIDENCE, R. I. • BOSTON • ATLANTA • CHARLOTTE





## PROVIDE SUPERIOR...LASTING SOFTNESS WITH DECERESOL 1861

DECERESOL\* 1861 Softener is a durable type softener composed of surface active colloids and possessing a high degree of compatibility. At optimum concentrations it imparts superior softening with a soft, silky, but not raggy hand to woolens, cottons and rayons as well as to other yarns and threads. DECERESOL 1861 reduces bleeding of direct colors, decreases crocking of naphthol colors and inhibits gas-fading tendencies of certain acetate colors. In warm water solutions, ordinary stirring produces good dispersion and stable suspension.

Write today for more detailed information as to general properties and methods of application.

### Check These Special Properties of DECERESOL 1861

- ✓ Compatible with gums, starches, acids, solvents, and dilute alkalis (less than 1% NaOH); also with sulfonated oils and casein solutions in proper ratios.
- ✓ Will not discolor white goods when specified concentrations are applied.
- ✓ Excellent for yarns, fabrics and for knit goods where maximum elasticity is desired.
- ✓ Yields greater resistance to hot-iron scorching than many cationic softeners.
- ✓ Retains softening properties after repeated washing, dry cleaning of fabric.
- ✓ Will not develop odors on goods. White goods will not retain chlorine after bleaching.
- ✓ Possesses wetting ability, normally making use of additional wetting agent unnecessary.

AMONG CYANAMID PRODUCTS FOR THE TEXTILE INDUSTRY ARE... Penetrants, Softeners, Finishes, Sizing Compounds, DECERESOL\* OT Wetting Agents, PARAMUL\*\* 115 Water Repellent, and other Specialties and Heavy Chemicals

\*Reg. U. S. Pat. Off. \*\*Trade-Mark

# American Cyanamid & Chemical Corporation

(A UNIT OF AMERICAN CYANAMID COMPANY)

30 ROCKEFELLER PLAZA • NEW YORK 20, N. Y.





# GOSSETT MILLS

ANDERSON, S. C.

## CHADWICK-HOSKINS CO.

CHARLOTTE, N. C.

---

*Manufacturers of*

Print Cloths, Jeans, Combed and Carded Lawns,

Carded Sales Yarn, Spun Rayon Yarns and a

WIDE RANGE OF RAYON FABRICS

Including Spun Rayon Suitings



MERCERIZE, BLEACH, DYE, SANFORIZE AND FINISH

---

**B. B. GOSSETT, President and Treasurer, 1117 Johnston Bldg., Charlotte, N. C.**

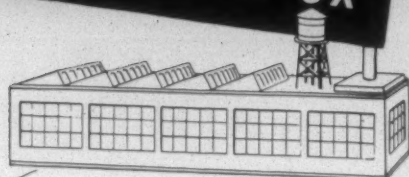


# An Oil for Sanforized Finishing that is

## ...NON-OXIDIZING

## ...NON-STAINING

**Improved EMERY  
Twitchell Oil 3x**



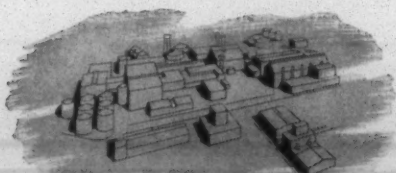
### MILL PROVED FOR:-

1. Fast, uniform rewetting
2. Retention of rewetting properties
3. Freedom from oxidation and staining
4. Low volatility—no volatile coupling agents
5. Lubricity imparted to Sanforizing shoes
6. Absence of gumminess in or deterioration of Palmer blanket
7. Compatability with starches, gums and other ingredients of finishing formulae
8. Low cost

### Other Emery Products for Textile Industry

1. **STEARIC ACID**—an ingredient in Stearic-base softening and finishing formulae which resist oxidation, yellowing and rancidity.
2. **OLEIC ACID (Red Oil)**—a high quality oleic acid for general usage in textile manufacturing.
3. **OTHER TWITCHELL OILS—**
  - 681, 685 { For Rayon coning, throwing, warp-sizing and & 687 { crepe-yarn soaking.
  - 304 { For softer hand in sanforized and regular finishing.
  - MC & { For lubrication of wool and worsted fibres and yarns
  - 308 { in carding, combing, spinning, weaving and knitting.

Emery's Twitchell Oil 3X is recommended also for increasing the water absorbency of toweling, wiping cloths, paper-maker's felts, etc., and for all regular finishing operations.



# EMERY

INDUSTRIES, INC.

CAREW TOWER • CINCINNATI 2, OHIO

3002 Woolworth Building  
NEW YORK 7, N. Y.

187 Perry Street  
LOWELL, MASSACHUSETTS

401 N. Broad Street  
PHILADELPHIA 8, PA.

STEARIC ACID • OLEIC ACID • ANIMAL AND VEGETABLE FATTY ACIDS • TWITCHELL PRODUCTS • PLASTICIZERS

**TWITCHELL PRODUCTS**





# naphtols

fast color salts  
and bases

**GENERAL DYESTUFF CORPORATION**

**435 HUDSON STREET, NEW YORK 14, NEW YORK**

**BOSTON • PHILADELPHIA • CHARLOTTE • PROVIDENCE • CHICAGO • SAN FRANCISCO**



AN ALABAMA INSTITUTION

Manufacturing Cotton Textiles

# ALABAMA MILLS, Inc.

WITH PLANTS AT:

Greenville . Wetumpka . Dadeville  
Aliceville . Winfield . Fayette . Clanton

---

Providing Employment for Over 2,700 Alabama Citizens

---

Main Office: 706 South 29th Street, BIRMINGHAM 5, ALA.

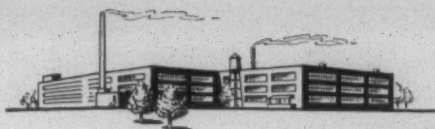
## ***Efird***— ***Manufacturing*** ***Company***



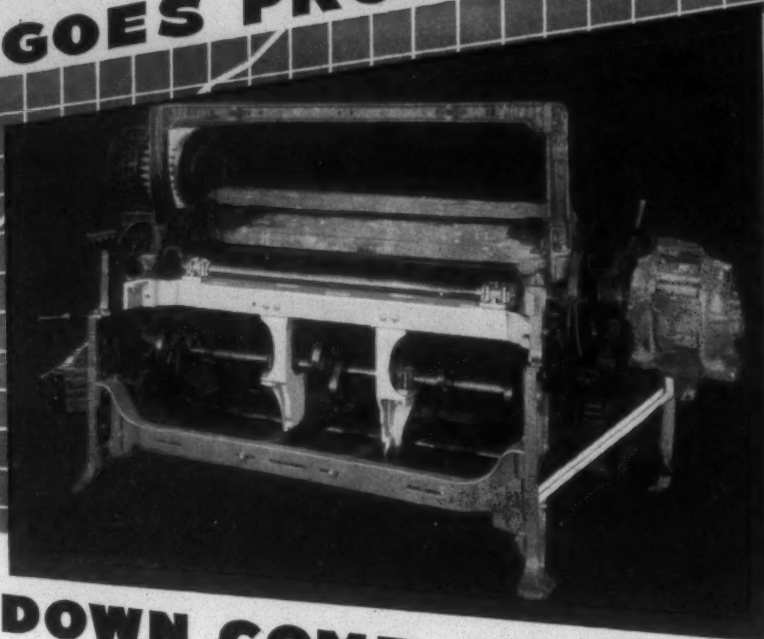
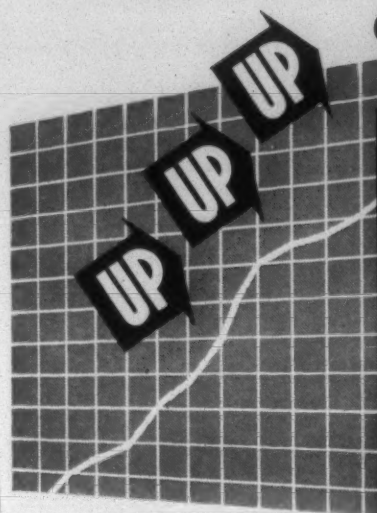
ALBEMARLE  
NORTH CAROLINA

***10's to 26's Single Carded Cones and Tubes.***  
***30's to 60's Single and Ply Combed***  
***Cones, Ball Warps and Tubes***





**GOES PRODUCTION**



Rear view of model E loom with whip roll removed to show spreader and auxiliary parts.

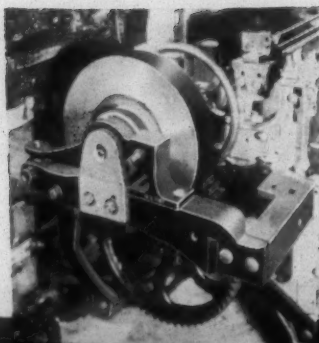
**DOWN COME COSTS!**

WHEN YOU INSTALL

# Hunt Spreaders

... ON YOUR PRESENT EQUIPMENT

Accelerated loom speeds up to 18%! Pick increases from 18 to 30 picks per minute! Production losses due to breakdowns cut to a bare minimum! That's the amazing record of HUNT SPREADERS, proven by actual day-to-day operation in over 120 southeastern mills. Have you investigated the possibilities for your plant? Write or wire for further information today.



HUNT FLYWHEEL DRIVE, companion installation to the Hunt Spreader. Ball-bearing clutch operation gives same effect as individual motor drive (starts from any position). Replaces tight-and-loose pulley drives. Prevents damage to loom from slamming.

**HUNT  
EQUIPMENT ADDS  
NEW LIFE TO  
LAZY LOOMS**

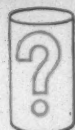
## Mountain City Foundry & Machine Co.

200 Academy Street, Greenville, South Carolina

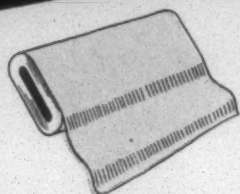


# Do Your Operations Require

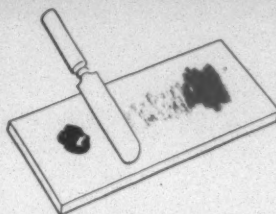
## IRON-FREE ALUMINUM SULFATE ?



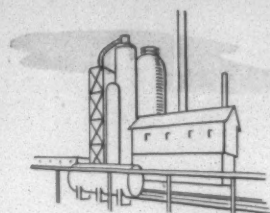
New Product?



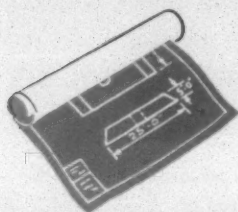
Textile Processing



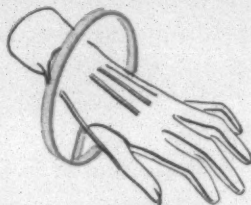
For Color Lakes and Pigments



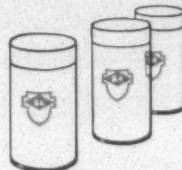
In Catalysts for Oil Refining



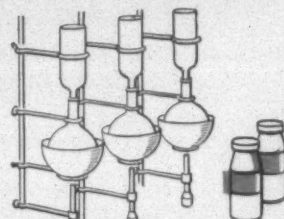
Sizing Special Papers



Leather Tanning



Raw Material for Other Industrial Chemicals



Producing Inorganic Reagents

### LUMP

Size: Approx. 2½"

Packing: Barrels or Drums,  
360 lbs. net

### GROUND

Size: Thru 8 Mesh

Packing: Barrels or Drums,  
380 lbs. net

Paper bags,  
100 lbs. net

Is yours one of the special processes requiring Aluminum Sulfate of consistently low iron content? If so, choose General Chemical Iron-Free Alum . . . a superior product developed expressly to meet industry's exacting demands.

Its uniformly high quality is the result of General Chemical's advanced manufacturing control techniques combined with all the skill and experience the Company has gained in almost half a century as the nation's foremost producer of alum for industry.

General Chemical Iron-Free Alum is available in lump and ground sizes. For immediate delivery from conveniently located shipping points, phone or write the nearest General Chemical Sales & Technical Service Office today.

### GENERAL CHEMICAL COMPANY

40 RECTOR STREET • NEW YORK 6, N. Y.

*Sales and Technical Service Offices:* Atlanta • Baltimore • Boston • Bridgeport (Conn.) • Buffalo • Charlotte (N. C.) • Chicago • Cleveland • Denver • Detroit • Houston • Kansas City • Los Angeles • Minneapolis • New York • Philadelphia • Pittsburgh • Providence (R. I.) • San Francisco • Seattle • St. Louis • Utica (N. Y.) • Wenatchee (Wash.) • Yakima (Wash.)

*In Wisconsin:* General Chemical Wisconsin Corporation, Milwaukee, Wis.  
*In Canada:* The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver

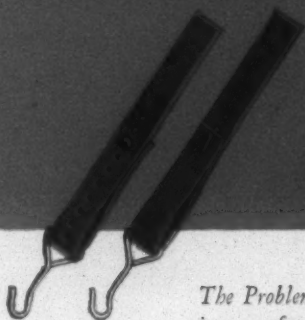
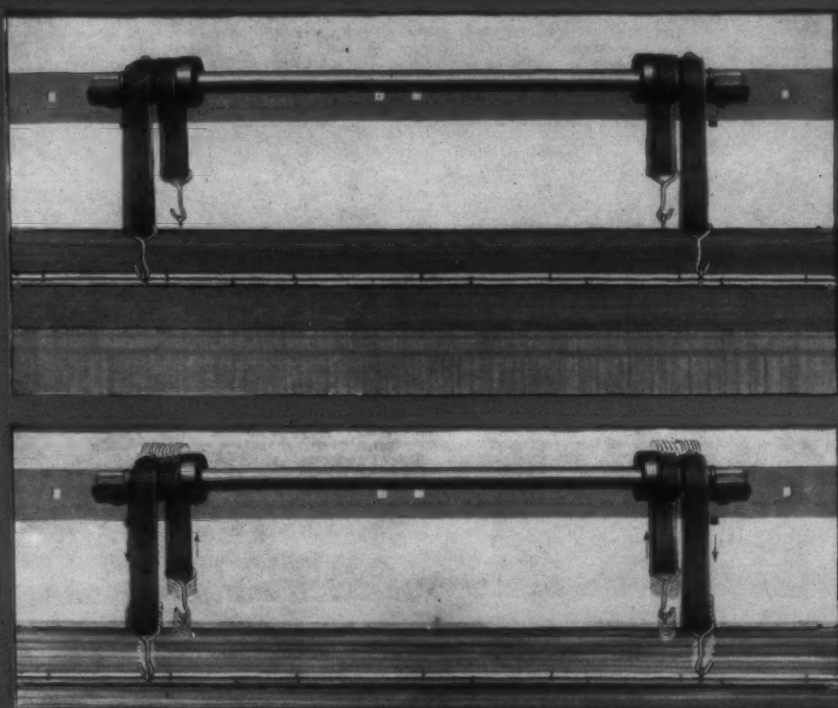




**LOOM LEATHER  
POINTERS No. 2  
TOP ROLL HARNESS STRAPS**

*The second in a series discussing the  
performance requirements of loom leathers*

**Strength  
Flexibility  
and  
Low Stretch  
are  
needed here**



*The Problem:* to support the harness in a perfectly horizontal position at all times and to stand up under constant rolling over the top roll shaft.

*Service Requirements:* ability to withstand constant tension created by the weight of the harness and the intermittent pull of the jack strap and to resist internal and surface wear as it winds over the top roll shaft, and high tear strength to prevent separation at the top roll and hook ends.

*The Solution.* Graton & Knight's "Hairitan" leather (furnished hairless for fabric protection). Because "Hairitan" Loom Leathers are selected

from the centers of the hides, the closely knit fibres provide high tensile strength, high tear resistance, and low stretch. Special curry provides flexibility and high resistance to frictional wear. "Hairitan" harness strapping is equally effective when used on other types of tops.

All products in Graton & Knight's ORANGE LINE of "Hairitan" loom leathers — pickers, check straps and other strappings — are identified by the orange color on the flesh side. Write for catalog on Graton & Knight textile leathers. Graton & Knight Co., 328 Franklin St., Worcester 4, Massachusetts.



# Orange Line Loom Leathers

A complete line manufactured by the world's largest manufacturer of industrial leathers. Supplied by the leading distributors in the textile industry. Look under "Graton & Knight" in "Belting" section of Classified Telephone Directory or THOMAS' REGISTER.



# ARAGON BALDWIN MILLS

WHITMIRE, SOUTH CAROLINA

---

*Manufacturers of*

**Rayon**

AND

**Fine Cotton Fabrics**

---

**J. P. STEVENS & CO., INC.,** Selling Agents  
NEW YORK, N. Y.



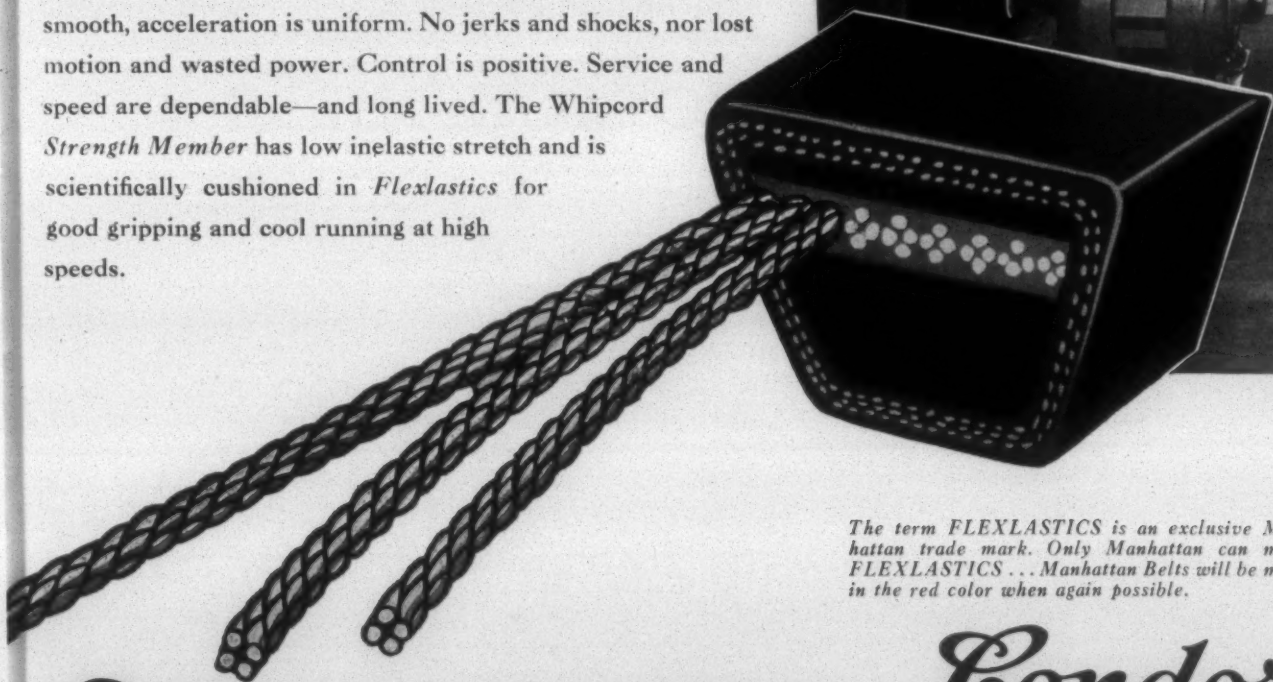
TEXTILE MILLS USE

# Condor

## WHIPCORD V-BELTS

for Smoother, Steadier Power Application

Yarn breakage on textile spinning machines is reduced. Time lost in making repairs is cut down drastically, because Condor Whipcord V-Belts work as a precision team. Starting is smooth, acceleration is uniform. No jerks and shocks, nor lost motion and wasted power. Control is positive. Service and speed are dependable—and long lived. The Whipcord *Strength Member* has low inelastic stretch and is scientifically cushioned in *Flexlastics* for good gripping and cool running at high speeds.



The term *FLEXLASTICS* is an exclusive Manhattan trade mark. Only Manhattan can make *FLEXLASTICS*... Manhattan Belts will be made in the red color when again possible.

## 8 POINTS of ADVANTAGE

are evident in the cross-section shown here:

- Wide margin of strength
- Minimum inelastic stretch
- Uniform flexibility
- Maximum resistance to structural breakdown
- Smooth running
- Maximum traction
- High resistance to side wear
- Correct lateral reinforcement

These 8 Points are correctly embodied in every Condor V-Belt. Other factors being equal, the useful life of a V-Belt is limited by excessive stretch

## Condor

PRODUCTS

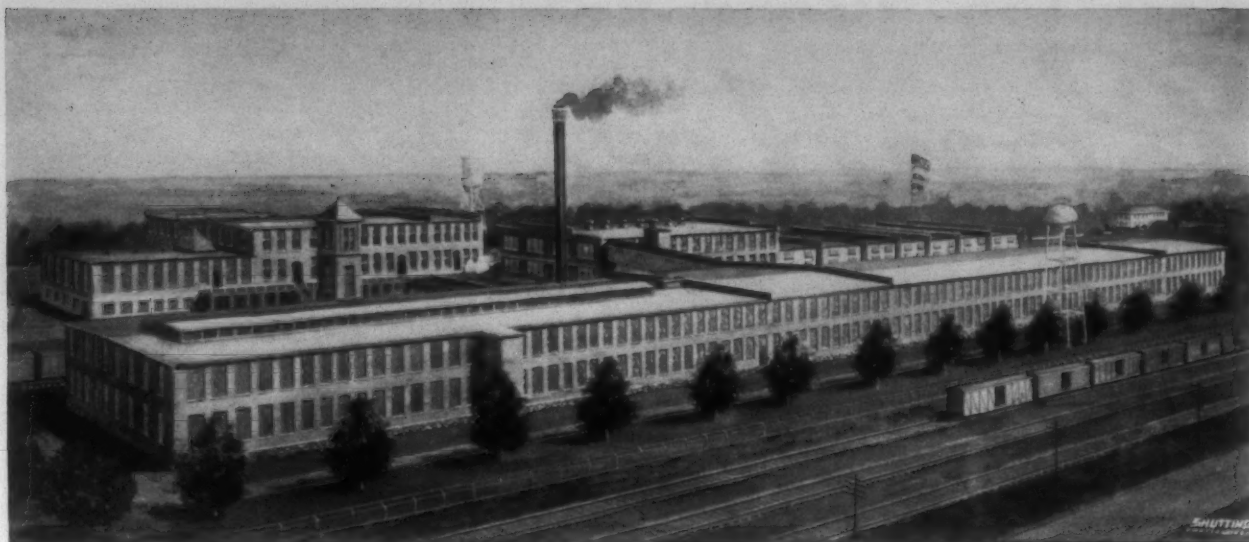
for the Textile Industry

Transmission Belts	Rubber Covered Rolls
V-Belts	Textile Specialties
Cone Belts	Loom Strapping
Air, Water and Steam Hose	Sand Roll Covering
Acid Hose	Oilless Bearings
Fire Hose	Pot Eyes
Vacuum Hose	Rubber Aprons
	Rubber Lined Tanks

# RAYBESTOS-MANHATTAN, INC.







MILL NO. 1  
NEWNAN COTTON MILLS  
NEWNAN, GEORGIA

# NEWNAN COTTON MILLS

NEWNAN, GEORGIA

ESTABLISHED 1888

Natural and Colored, Novelty, Cotton, Rayon, Mixed Fibre and  
Worsted Knitting and Weaving Yarns and Fabrics

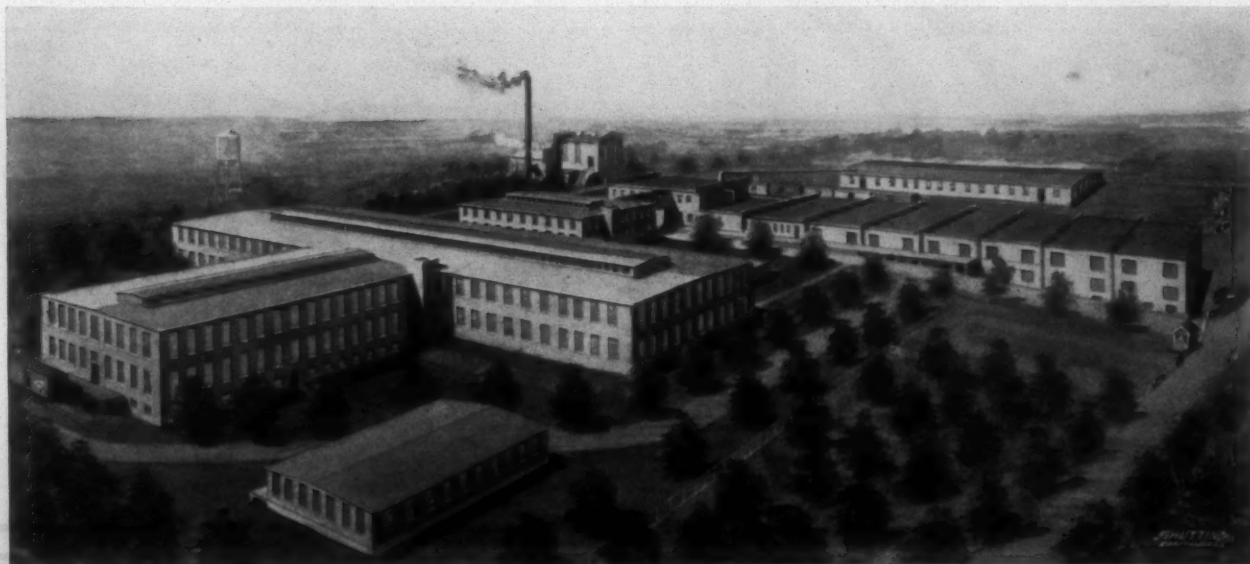
NEW YORK OFFICE: 2 PARK AVE.

Turner Halsey Co. + 40 Worth St., New York

Carl L. Miller . . . . . Reading  
Carl L. Miller, Jr. . . . . Philadelphia

Robert G. Miller . . . . . Utica  
Cosby and Thomas . . . . . Charlotte

C. M. Patterson . . . . . Chicago  
J. P. Rickman . . . . . Chattanooga

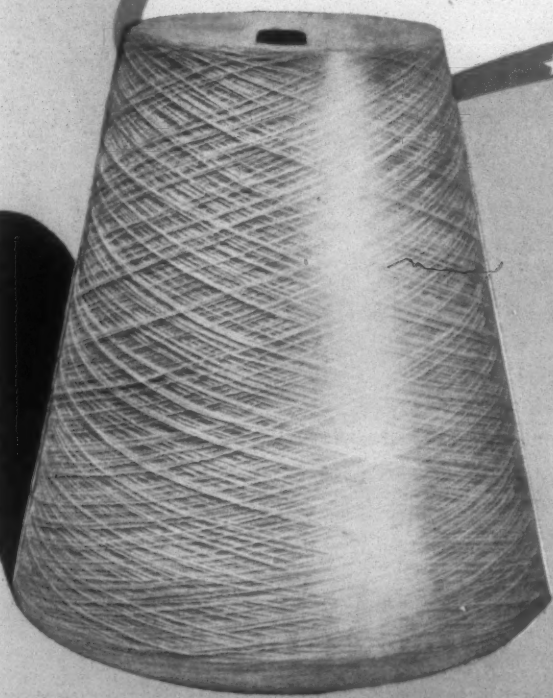


MILL NO. 2  
NEWNAN COTTON MILLS  
NEWNAN, GEORGIA



# The AMERICAN

## Way of LIFE...



**AMERICAN**  
Yarn and Processing  
Company

Mount Holly  North Carolina

The American way of life today is world-famous. The American way of life *tomorrow* staggers the imagination.

Two-way phone communication from highway to office and home...rocket planes...nation-wide television...what next?

We're proud that over the years, "American" has consistently delivered the highest quality of Durene Yarns. And whatever technical and scientific advances accomplish, maintained quality will continue to be American Durene's promise and performance.

Made of  
**Durene\***  
multi-ply, mercerized combed  
cotton yarn  
**4 WAYS BETTER**  
than ordinary cotton yarns  
EXTRA COMFORT  
---more absorbent  
EXTRA STRENGTH  
---longer wear  
EXTRA QUALITY  
---lasting lustre  
EXTRA SERVICE  
---easy to wash  
\* Reg. U.S. Pat. Off. © 1944

W. H. SUTTENFIELD, Vice-President and Sales Manager

CHATTANOOGA, TENN.  
Mr. H. W. DAVENPORT  
735 Chestnut Street

NEW YORK, N. Y.  
Mr. ROWLAND SWALLOW  
Empire State Bldg.

HIGH POINT, N. C.  
Mr. E. J. HOLBROOK  
MOUNT HOLLY, N. C.  
Mr. EDWIN HUTCHISON  
Miss E. R. ABERNETHY  
Mr. T. J. DAVIS

PHILADELPHIA, PA.  
Mr. Wm. S. MONTGOMERY  
3701 N. Broad St.

CHICAGO, ILLINOIS  
Mr. E. W. WOOD  
222 West Adams St.



SLATER MANUFACTURING CO., INC.



*Slater, S. C.*

EXECUTIVE OFFICES  
JEFFERSON STANDARD BUILDING  
GREENSBORO, NORTH CAROLINA

*Weavers of  
Quality Rayon  
Fabrics*

*Selling Agents*

J. P. STEVENS  
& COMPANY

1410 Broadway • New York City



# As this bearing rolls...

# so rolls your production!

**T**HEY'RE ROLLING throughout your plant—hundreds of ball-bearings like this. As they speed 'round their raceways, your machines speed with them. If they wear out and stop, your production stops, too.

That's why it's so important to make sure that they are protected by superior lubricants — by Gargoyle Greases BRB. These carefully compounded greases form strong films over highly polished surfaces for maximum protection

against wear, rust and corrosion. They resist oxidation and separation, seal out impurities and reduce leakage to a minimum.

Two grades of Gargoyle Greases BRB are customarily used for anti-friction bearings . . . No. 3 for all ball and roller bearings operating under normal conditions . . . No. 4 for anti-friction bearings at high temperatures or high speeds.

See your Socony-Vacuum Representative for counsel on the correct grades for your bearings.

## Socony-Vacuum Oil Co., Inc.

And Affiliates: Magnolia Petroleum Co., General Petroleum Corp. of Calif.

TUNE IN "INFORMATION PLEASE" MONDAY EVENINGS, 9:30 E.S.T.—NBC

**Get this Complete  
Lubrication Program  
for all your machines**

- Lubrication Study of Your Entire Plant
- Recommendations to Improve Lubrication
- Lubrication Schedules and Controls
- Skilled Engineering Counsel
- Progress Reports of Benefits Obtained





## **Hannah Pickett Mills Co.**

Main Offices: ROBBINS, N. C.

Mills at ROCKINGHAM, N. C.



## **The Mid-State Cloth Mills, Inc.**

Main Offices: ROBBINS, N. C.

Mills at RED SPRINGS, N. C.



## **Robbins Cloth Mills, Inc.**

ROBBINS, N. C.

Mills at ROBBINS, N. C.





"Leave us face it—it smells!" shouted the mill manager, pointing to the bolt of cotton on his desk. And there was no doubt about it, the cloth had a very disagreeable odor.



After sniffing critically and carefully examining the offending cloth, the Armour Soap Sleuth put away his glass. "It's no wonder you've had complaints," he said. "Your trouble lies in the after-scouring."



"You see, after-scouring on cottons and rayons calls for a good high-titer soap that not only knocks out scum, throwing oils and weaving compounds, but also rinses thoroughly and fast to prevent rancidity."



"For a job like this you need a soap like Armour's Flint Chips. Its titer is guaranteed from 41-42°C. . . its rich, full-bodied suds stay active even under steam! You can be sure that your cottons and rayons will always come out *bright, clean and sweet-smelling* . . . Flint penetrates quickly, rinses completely and fast! Incidentally, you'll find Flint useful on your waterproofing and mildew proofing operations, too!

INDUSTRIAL SOAP DIVISION

**Armour  
and Company**

1355 West 31st Street • Chicago 9, Illinois



# POMONA

## MANUFACTURING COMPANY

GREENSBORO, N. C.

*Manufacturers of*  
**FINE FABRICS and YARNS**



**WALTER DILLARD**  
Executive Vice-President



we don't  
want to be  
**CAUSTIC**  
about caustic...



**NO!** That's the last thing we want to be accused of...and, to avoid any such possible criticism, we're laying the cards on the table — face up.

Sure, Caustic is still short — and it's likely to be for an indefinite time. (We only wish we were making more!) Now *we* produce high quality Caustic — Rayon Grade. As is well known, certain consumers can use only the purer grades of Caustic Soda. We've been delivering the highest quality Caustic during the critical war years. The important thing has been to produce and deliver

against commitments. This we have done.

Today, it's still a question of supply and demand and frankly, we are unable to supply all the consumers who would like to use Mathieson quality Caustic. But we are confident that we will again be able to take care of the requirements of those to whom we have committed ourselves.

THE MATHIESON ALKALI WORKS (Inc.)  
60 East 42nd Street • New York 17, N. Y.



CAUSTIC SODA . . . SODA ASH . . . LIQUID CHLORINE . . . BICARBONATE OF SODA . . . CHLORINE DIOXIDE . . . AMMONIA, ANHYDROUS & AQUA . . . HTH PRODUCTS . . . FUSED ALKALI PRODUCTS  
SYNTHETIC SALT CAKE . . . DRY ICE . . . CARBONIC GAS . . . SODIUM CHLORITE PRODUCTS . . . SODIUM METHYLATE



## REPUBLIC COTTON MILLS

GREAT FALLS, SOUTH CAROLINA

*Manufacturers of*  
CARDED BROADCLOTHS  
and PRINT CLOTHS

Selling Agents  
CANNON MILLS, INC.  
70 Worth Street New York, N. Y.



FINE COMBED GOODS  
and  
SILK AND RAYON MIXTURES

Selling Agents  
J. P. STEVENS & CO., INC.  
44 Leonard Street New York, N. Y.

## The D. E. CONVERSE CO.

GLENDALE

South Carolina

*Manufacturers of*

Print Cloths  
Sheetings  
Drills  
Osnaburgs



## JOANNA TEXTILE MILLS CO.



GOLDVILLE  
SOUTH  
CAROLINA

MANUFACTURERS OF

QUALITY  
WINDOW  
SHADE  
CLOTHS



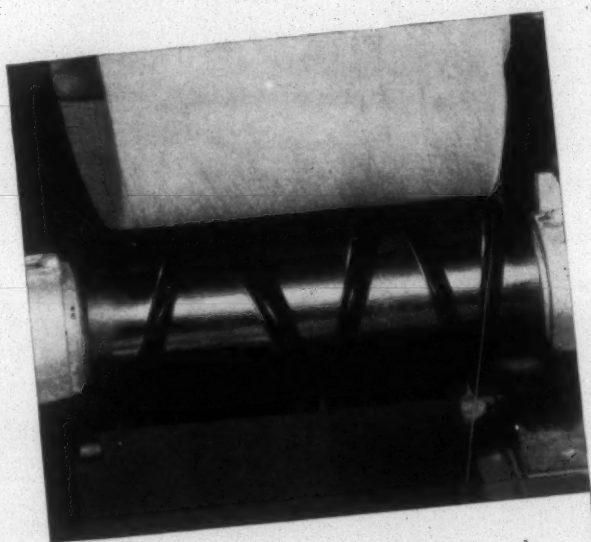
# CONES that simplify knitting... from a MACHINE that simplifies winding

Knitting mills prefer Roto-Cones because they eliminate press-offs that result from stitches, roll cuts, and yarn sloughing-off. Spinning mills like Roto-Coners\* because they are easy to operate and easy to maintain.

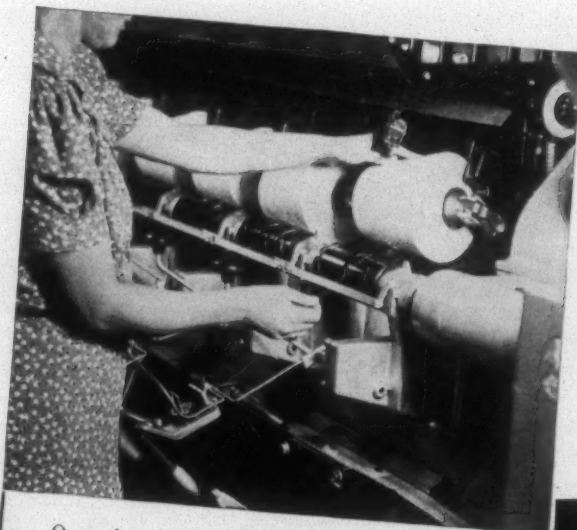
To give your customers paper cones of yarn that will satisfy them in every respect... to put your winding room on the most economical basis... consider the Roto-Coner\* — the high-speed winding machine with the exclusive Rotary Traverse. Write for Bulletin 144, addressing Universal Winding Company, Providence, Boston, Utica, Charlotte, Atlanta.

\*Reg. U. S. Pat. Off.

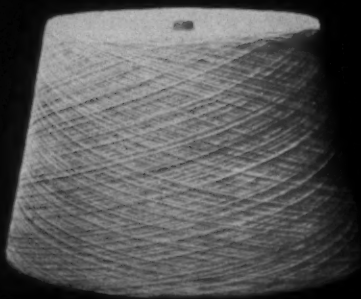
23-5-16



Roto-Cones are free from stitches because the groove in the Rotary Traverse reverses the yarn quickly at the ends of the traverse... are free from cut yarn because the Rotary Traverse is a smooth, one-piece combination driving drum and yarn guide... will not slough off because the steep-angled lay of yarn (the same for all yarn counts) insures free delivery at all package diameters.



Operation of the Roto-Coner\* is extremely simple. The machine is quiet, controls are conveniently located, adjustments are few. The Rotary Traverse is standard for all yarn sizes, and no reduction in speed is needed when changing to coarser counts. There are no cams or fast-wearing reciprocating parts to be lubricated. Maintenance is held to a minimum, running to about  $\frac{1}{4}$  of 1% of investment cost per year.



**ROTO-CONER**   
*Open-Wind Cones for Knitting*

REG. U. S. PAT. OFF.

WARPING CONES • DYEING PACKAGES • PARALLEL TUBES FOR TWISTING



# You get 3 for 1 when you use

"REDUCES SHEDDING TO A MINIMUM"



"MAKES SLASHER BLANKETS LAST LONGER"



"INCREASES PRODUCTION BY REDUCING FRICTION AND BREAKAGE"



**Caro-Gant**

**A CONCENTRATED COTTON WARP SIZE**

"GOES THREE TIMES FARTHER THAN ORDINARY SIZING"



Yes, when you use Caro-Gant, the modern scientific sizing compound, you get the equivalent of three barrels for one with a substantial saving in slashing costs. Because Caro-Gant is 100% concentrated — no moisture — no salts — it goes three times farther than ordinary sizing compound.

Actual experience of leading mills over many years proves that the use of Caro-Gant consistently results in higher efficiency in the weave shed.

Caro-Gant is perfectly balanced and works on any kind of weave from coarse to very fine. It guarantees good kier boiling because its ingredients are easily emulsified and removed. With Caro-Gant, you eliminate soft warps, brittle yarns, excessive shedding, un-

necessary loom stoppage and profit-reducing seconds. It is the proven satisfactory compound for cotton, warp dressing.

**THE HART PRODUCTS CORP.**  
Manufacturing Chemists  
1440 Broadway, New York, N. Y.

#### HARTEX PRODUCTS

Rayon Oils & Sizes	Splashproof Compounds
Nylon Oils & Sizes	Delustrants
Kier Bleaching Oils	Leveling Agents
Finishing Oils	Cationic Softeners
Synthetic Detergents	Cotton Warp Dressings
Conditioning Agents	Wetting-Out Agents
Scrooping Agents	Weighting Agents
Sanforizing Oils	Mercerizing Penetrants

#### ARRANGE FOR A DEMONSTRATION

Let our demonstrator prove, in YOUR plant, the benefits resulting from the use of CARO-GANT. Your inquiry entails no obligations.



# Hart

## PRODUCTS

based on research

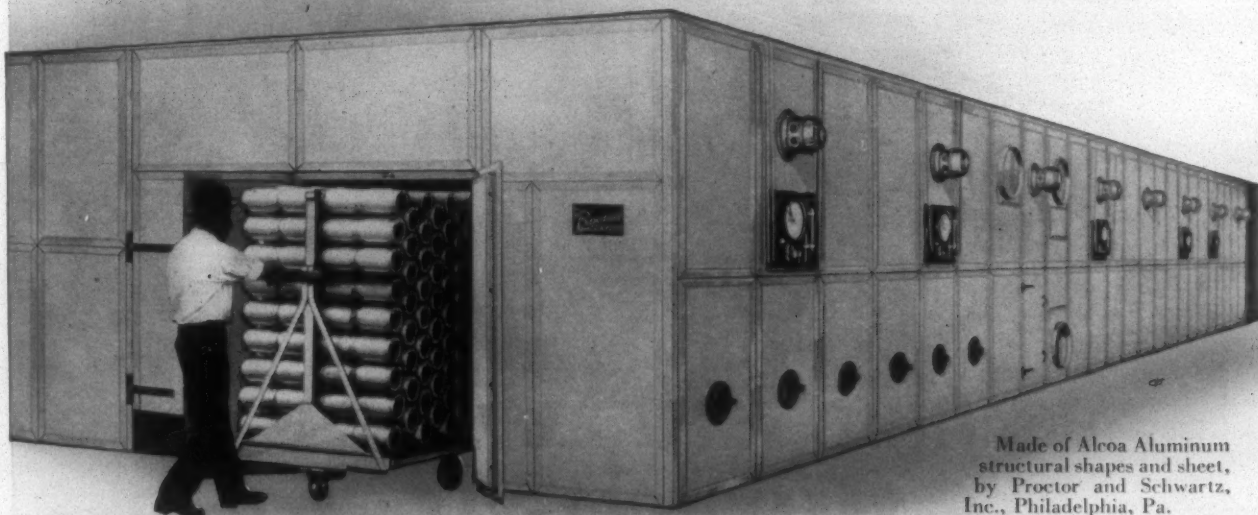


# 1 THE FLOOR LOADING...AND 3 no rust

Let's analyze those two basic reasons for building a yarn dryer out of Alcoa Aluminum:

Aluminum weighs only 1/3 as much as steel.

This lightness can be a big factor in the placement of large equipment to fit your production line. No need to "beef up" supporting structures.



Made of Alcoa Aluminum structural shapes and sheet, by Proctor and Schwartz, Inc., Philadelphia, Pa.

Rust? A bug-a-boo in all textile mills. If rust-laden drops of water fall on your fabrics, seconds result. If equipment parts rust out, you have high repair bills. With aluminum, neither of these things can happen. Alcoa Aluminum, highly resistant to corrosion, will not rust, requires no protective paint to prolong its service life . . . maintenance costs are held to a minimum.

The story is just as strong when talking about ventilating ducts, hoods, and other mill equipment made of Alcoa Aluminum. ALUMINUM COMPANY OF AMERICA, 1898 Gulf Building, Pittsburgh 19, Pennsylvania.

## ALCOA FIRST IN ALUMINUM





Knitting Yarns



In Pastel Tints

**Hugh Grey Hosiery Co.**

CONCORD, NORTH CAROLINA



Manufacturers of

WOMEN'S FULL FASHIONED

*hosiery*

45 and 51 Gauge



Exclusive Selling Agents

**S. D. ARROWOOD & COMPANY**

EMPIRE STATE BUILDING • NEW YORK CITY

**ATKINSON HASERICK & CO.**

211 CONGRESS ST., BOSTON 6, MASS.



COMPLETE LINES OF BOTH BRADFORD AND FRENCH

**WORSTED MACHINERY**



**The *Only* Machine That Will Dye  
ONE, TWO, THREE or FOUR Beams or  
Yarn Carriers Under *Identical*  
Conditions!**



**Pressure . . . Flow . . . Liquor Ratio . . .  
are *Automatically Adjusted!***

For many years it was considered impossible to dye more than one beam or yarn carrier in the same dye bath, at the same time, because of the long liquor ratio that would be required. But the *Smith-Drum Clover Leaf Beam and Package Dyeing Machine* . . . introduced several years ago . . . made it possible and practical to dye as many as four beams or yarn carriers at once, in the same machine, with exactly the same liquor ratio as required to dye only one!

This results in absolutely uniform dyeing . . . because each beam or package carrier is dyed at the same temperature, pressure, flow and with the same additions of dyestuffs.

When less than a full load is to be dyed, pressure, flow and liquor ratio are automatically adjusted so that they remain the same as when dyeing a full load. Furthermore, pressure and flow can be varied at will by the operator, to allow for various sized beams.

This machine not only assures uniform dyeing results . . . but it also permits definite economies in operation. Send for complete information.

**SMITH, DRUM & COMPANY**  
Allegheny Ave. at 5th Street — Phila. 33, Pa.



Four Times Winner of Army-Navy "E"

**SMITH-DRUM. PROCESSING MACHINERY**

for hosiery dyeing, skein dyeing, package dyeing, beam dyeing, piece goods dyeing, package extracting, package drying, skein mercerizing, warp mercerizing, hosiery inspection.



*Modern*  
**Package and Rotary  
Dyeing Machines**

ALL STAINLESS STEEL

...

*Manufactured by*  
**BURLINGTON ENGINEERING CO.**  
BURLINGTON, N. C.

*Represented by*

J. A. Okey	Graham, N. C.
Wm. E. Wyche	Gastonia, N. C.
Chas. L. Okey	Rock Hill, S. C.

**LILY TAPE THREAD**

500 YARDS

SIZES:  
No. 16  
and 20



Highest Quality Sewing Thread  
Long Staple Cotton - 4 Cord Construction  
for sewing on spinning and twisting tapes

Write direct or to your mill supply house  
**LILY MILLS COMPANY**  
SHELBY, NORTH CAROLINA

*Congratulations and Best Wishes*


to DAVID CLARK and TEXTILE BULLETIN  
upon the completion of 35 Years of Service  
to the Southern Textile Industry



**Massapoag Mills Corporation**  
Lincolnton, N. C.

Manufacturers of Ducks and Drills





# *Fastness is Fashionable*

Fastness and fashion go hand in hand. Brilliant colors are an inspiration to creative stylists. They serve, too, to answer the demands of the color-hungry public.

But color fastness is just as important as shade or brilliance. A color that fades or loses its brilliance has no place in today's fashions.

Look to Du Pont to supply the fast dyes and technical services that will help you to deliver a dye job worthy of the finest fashions. E. I. du Pont de Nemours & Co. (Inc.), Dyestuffs Division, Wilmington 98, Del.

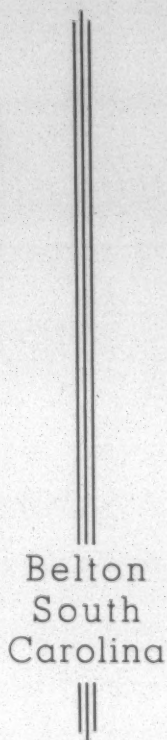
## *Du Pont Dyestuffs*



BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY



# Belton Mills



*Beacon*

## BLANKETS

*Make Warm Friends*



Beacon Manufacturing Co.

Swannanoa, N. C.

# JORDAN MILLS, INC.

COLUMBUS  
GEORGIA

*Manufacturers of*

## JORDANE

*Products*

Regular Yarns  
in Any Type Dye Desired  
All Colors



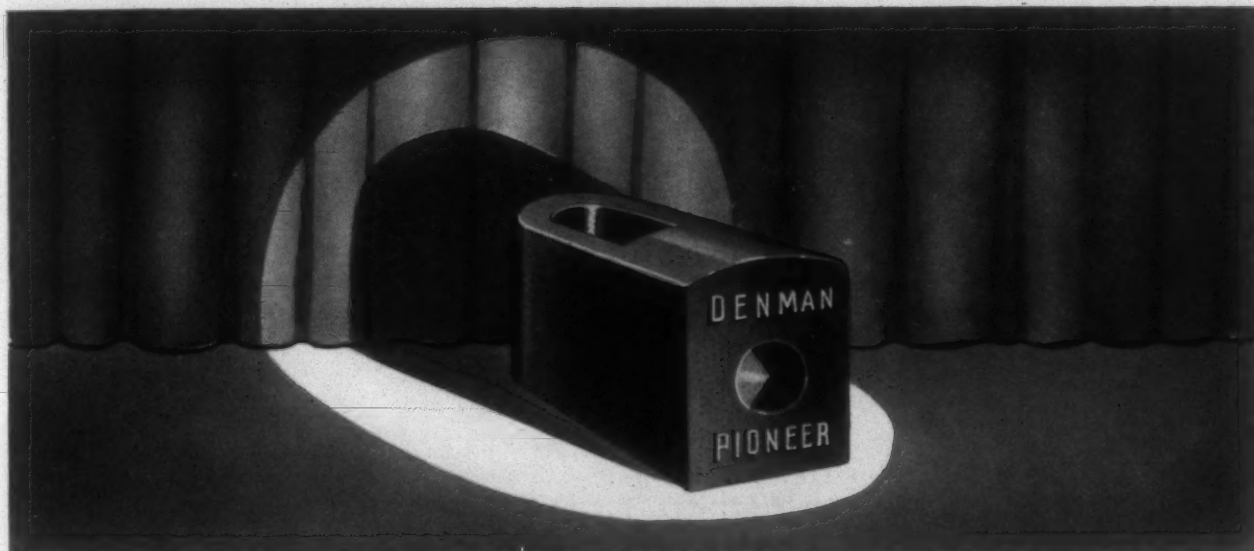
Upholstery and Draperies  
Seamless Hosiery



DENMAN LABORATORIES KNOW

TERRELL FIELD MEN KNOW

HOW  
WHY



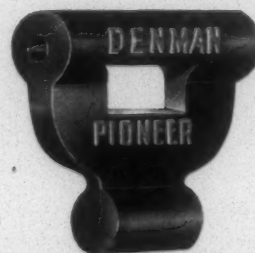
*Look to the Leader for the Latest Developments*

When modern, high-speed looms demanded pickers of unprecedented toughness and resiliency . . . Denman research engineers and Terrell field men met the challenge.

Working together, they acquired the KNOW-WHY as well as the KNOW-HOW that have made Denman famous throughout the textile industry for

**LOWEST COST PER LOOM PER YEAR**

For over a decade, Denman has led in the development of rubberized fabric loop and reversible pickers. Mills get the BEST FIRST from DENMAN.



**DENMAN**  
LOOM PARTS

Sold exclusively by

**The TERRELL COMPANY, Inc.,** 1200 N. Church St., CHARLOTTE, N. C., U.S.A.





PACIFIC MILLS, LYMAN, S. C.

## ***PACIFIC MILLS***

COTTON AND RAYON DIVISION  
Mills at Lyman and Columbia, South Carolina  
Rhodhiss Cotton Mills, Rhodhiss, North Carolina

NEW YORK SALES OFFICE: 214 CHURCH STREET

## BARKLEY MACHINE WORKS

*Manufacturers of*  
**Textile Machinery Parts**

Telephone 729 • GASTONIA, NORTH CAROLINA



PROXIMITY MANUFACTURING CO.

GREENSBORO, N. C.



*"In the beginning  
there was nothing  
but Proximity to  
the cotton fields"*

CONE EXPORT AND COMMISSION CO., INC., SELLING AGENTS

59 WORTH STREET, NEW YORK 13, N. Y.



*Locke Cotton Mills*

CONCORD, NORTH CAROLINA

Manufacturers of

Drapery and  
Upholstery Fabrics



*Marion*

MANUFACTURING CO.



Quality  
Rayon and  
Cotton  
Fabrics

MARION, NORTH CAROLINA

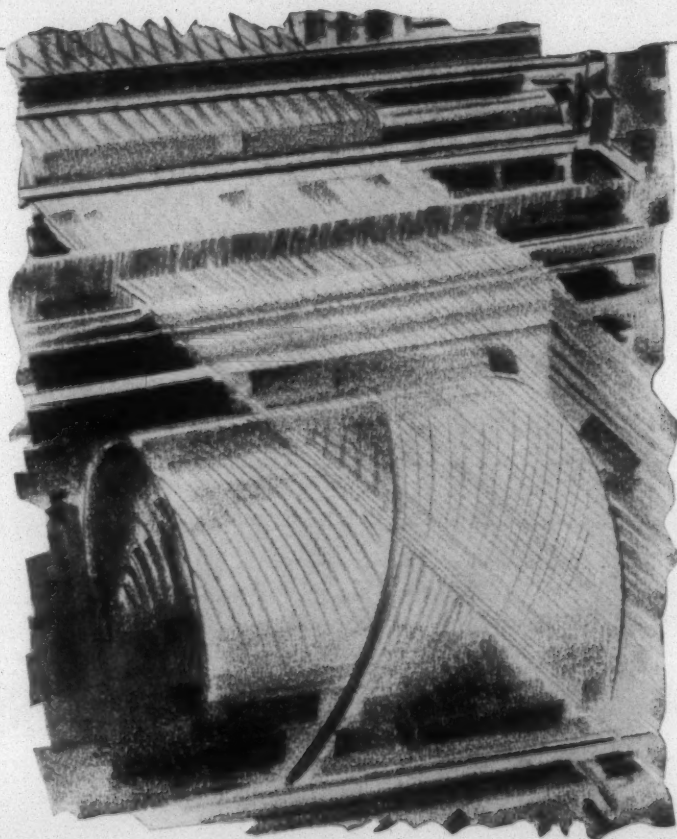
**Avondale  
Mills of  
Alabama**

GENERAL OFFICES  
SYLACAUGA, ALA.

Founded in 1897 by Governor B. B. COMER



# *"Reduced drag ...with Tycol spindle oil"*



“Not a single tube lost . . .  
Reduces spindle drag . . .  
Reduces holster losses . . .  
Steps up production . . .  
Cuts down on maintenance costs . . .”

— says a textile mill operator. “With Tycol Spindle Oil,” he goes on, “we’re able to operate continuously at top speed — and we don’t have to worry about the oil losing its body at operating temperatures.”

For further information about Tycol Spindle Oil, get in touch with your nearest Tide Water Associated Dealer.

**LUBRICATION — “ENGINEERED TO FIT THE JOB”**



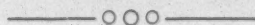
Boston • Charlotte, N. C.  
Pittsburgh • Philadelphia





# WEST POINT MANUFACTURING COMPANY

WEST POINT, GEORGIA



## Operating Divisions

LANETT MILL  
LANETT, ALA.

SHAWMUT MILL  
SHAWMUT, ALA.

LANGDALE MILL  
LANGDALE, ALA.

FAIRFAX MILL  
FAIRFAX, ALA.

RIVERDALE MILL  
RIVERVIEW, ALA.

WEST POINT UTILIZATION CO.  
FAIRFAX, ALA.

## Subsidiaries

WELLINGTON SEARS CO., Selling Agents  
65 Worth Street • New York

THE DIXIE COTTON MILLS  
LaGrange, Ga.



MOULTRIE COTTON MILLS

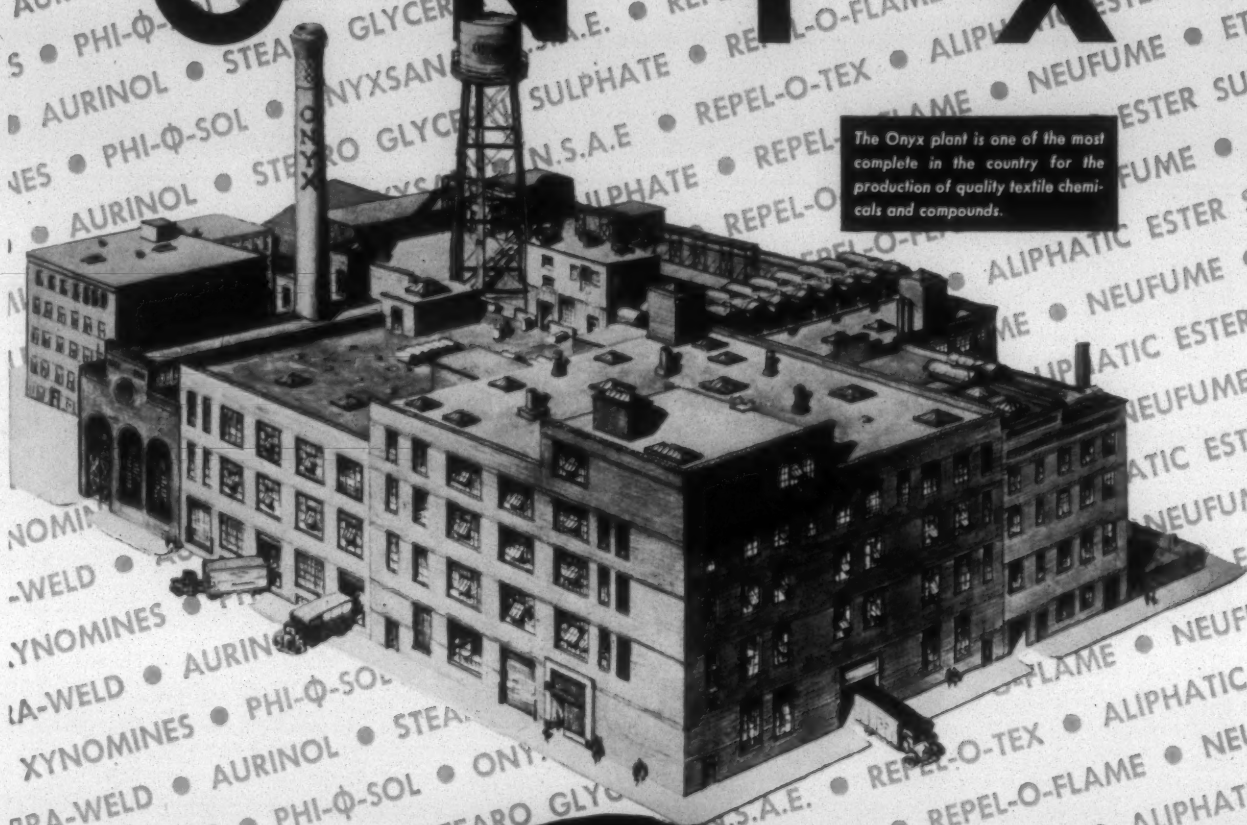
★ DRILLS

MOULTRIE, GEORGIA





# ONYX



The Onyx plant is one of the most complete in the country for the production of quality textile chemicals and compounds.

## ONYX PRODUCTS In The Service Of The TEXTILE INDUSTRY

For the processing and finishing of every type of fabric, made of natural or synthetic fibers or any combination of fibers—Onyx Products—Onyx Research—Onyx Production Facilities are at the service of the textile industry. For better processing and finishing—always use Onyx Products.

Dyers and finishers are invited to submit their requirements and special problems.



## ONYX OIL & CHEMICAL COMPANY

JERSEY CITY, N. J.

CHICAGO

PROVIDENCE

CHARLOTTE

IN CANADA: ONYX OIL & CHEMICAL CO., LTD.—MONTREAL • TORONTO • ST. JOHNS, QUE.



THE FINEST QUALITY

*Carded*

**BROADCLOTH**

AND

**PRINT CLOTH**

**Gaffney Manufacturing Company**

GAFFNEY, SOUTH CAROLINA

**Kerr Bleaching and Finishing Works, Inc.**

CONCORD, NORTH CAROLINA

FIFTY-SIX YEARS OF SERVICE IN THE TEXTILE FIELD



**Bleachers, Finishers,  
Dyers, Nappers,  
Sanforizers of Cotton Piece Goods**

New York Soliciting Sales Agent: W. G. STEWART • 40 Worth Street • Telephone WO. 2-1064



# BELTS built for the TEXTILE INDUSTRY by RUSCO

*"Every Belt Engineered For the Drive"*

## RUSCO CARD BELTS

Rusco Endless Card Belts—Doffers and Flats with their no-slip, no-stretch features—give constant tension and are not affected by grease and oil. All belts are supplied with special edge protection.

## RUSCO TWISTER BELTS

Rusco Dolphin Twister Belts were developed exclusively for twister frames. Flexible, quiet and smooth-running, this belt has the lowest possible percentage of permanent stretch and maintains maximum spindle speed throughout its long trouble-free life. Made in 4 ply,  $3/16$ " thick and in 6 ply,  $1/4$ " thick, Rusco Dolphin Twister Belts are supplied in rolls or endless, using the Rusco patented interwoven process.

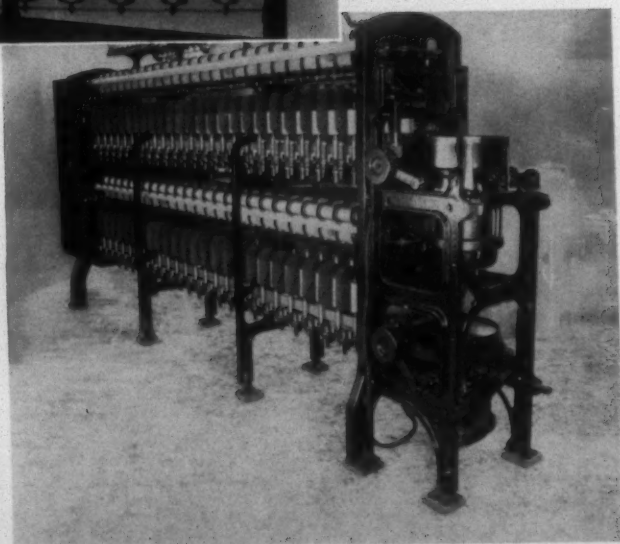
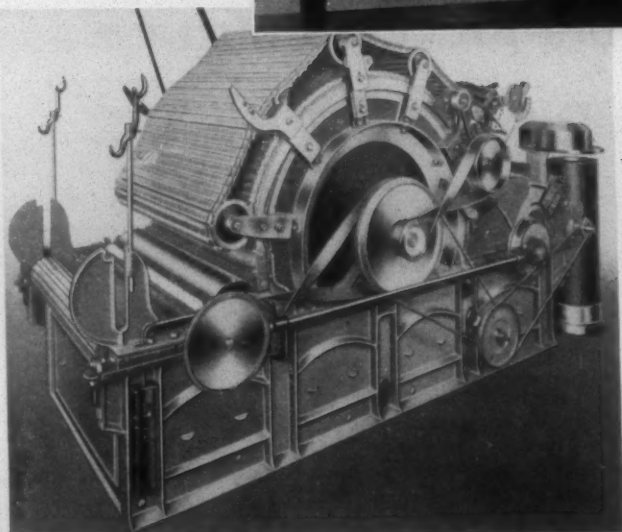
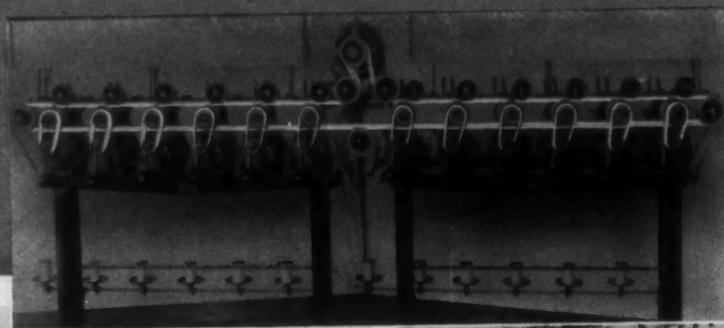
## RUSCO UNIVERSAL WINDER BELTS

Rusco belts for Universal Winders are equally satisfactory for flat bed or serpentine drive. They are flexible and oil resistant—highly efficient—low in cost.

## RUSCO GAINER BELTS

Rusco Gainer Belts are 100% endless. Smooth-running, they produce perfect packages on cotton, rayon or linen. All sizes are carried in stock.

*Write for our new textile belting catalogue.*



The RUSSELL MANUFACTURING COMPANY, Middletown, Conn.

*Distributors in Principal Cities*





*Weavers of*  
**QUALITY  
RAYON  
FABRICS**

**CLEVELAND CLOTH MILLS**  
SHELBY, NORTH CAROLINA



Selling Agents

J. P. STEVENS & COMPANY  
1410 BROADWAY + NEW YORK CITY

**CHIQUEOLA MANUFACTURING CO.**  
HONEA PATH, SOUTH CAROLINA

MANUFACTURERS OF

*Converting Cloths*



Selling Agents — WOODWARD, BALDWIN & CO. — 45 Worth St., New York, N. Y.



# CARTER FABRICS CORPORATION

Greensboro, North Carolina ♦ South Boston, Virginia

---

Executive Offices — Jefferson Standard Bldg., Greensboro, N. C.

☆ WEAVERS OF QUALITY

***Rayon Fabrics***

---

***Selling Agents — J. P. STEVENS & CO., INC.***

1410 BROADWAY ♦ NEW YORK CITY



## Glenwood Cotton Mills

Easley, South Carolina

MANUFACTURERS OF

*Print Cloth*



## Pickens Mill

Pickens, South Carolina

MANUFACTURERS OF

*Sheetings*

## ROWAN

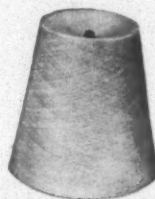
COTTON MILLS

**SALISBURY**

**NORTH CAROLINA**

10's to 50's Single Combed

**KNITTING  
YARNS**



**DOVER MILL CO.**

SHELBY, NORTH CAROLINA

*Specialties*

**ORA MILL CO.**

SHELBY, NORTH CAROLINA

*Fancies*

**ESTHER MILL CO.**

SHELBY, NORTH CAROLINA

*Fancies*

**DORA YARN MILL CO.**

*Combed and Carded Weaving Yarns 10's to 40's*  
CHERRYVILLE, NORTH CAROLINA



Selling Agents

**FOX, WELLS AND WARREN**

450 Seventh Ave. • NEW YORK CITY

*Best Wishes*

*to*

**TEXTILE BULLETIN**

on the occasion of its

**35th Anniversary**



**CLOVER SPINNING MILLS**

**INCORPORATED**

CLOVER, S. C.

CARY C. BOSHAMER, President





*"I remember the first time one of your men came in... he gave us the tip that started us using Lykopen during the first World War."*

### THE SERVICE THAT BUILT OUR BUSINESS CAN HELP YOURS

Our business has been built largely on the practical help we have been able to give our customers, right in their own plants, in adapting Rohm & Haas products to their needs.

Our representatives are men with technical training and practical experience in the use of industrial chemicals. Call in a member of our textile chemicals department when you need assistance in choosing or using...

*Fine Chemicals For  
Fine Quality Textiles*

**M**ANY a year has passed since mill men first learned about LYKOPON from Rohm and Haas representatives.

Today textile people don't need to be told about LYKOPON. They know that the product which first made vat dyeing in the United States independent of foreign suppliers remains the leader in the field... outstanding among sodium hydro-sulfites for its purity, strength and uniformity.

Talking with Rohm and Haas representatives is *still* a good way to keep abreast of things in textile chemicals... Let us know if you would like one of our men to call and tell you about our newer textile products. Some of these materials may be just what you need—as helpful as the industry's foremost reducing agent...

## LYKOPON

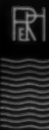
LYKOPON is a trade-mark Reg. U. S. Pat. Off.

Represented in Canada by Rohm & Haas Company of Canada, Ltd., Toronto; and in South America by Cia. Rohm y Haas, S. R. L., Carlos Pellegrini 331, Buenos Aires, Argentina, and agents in principal South American cities

# ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Manufacturers of Chemicals for the Textile, Leather and other Industries . . . Plastics . . . Synthetic Insecticides . . . Fungicides . . . Enzymes





*Spray*  
**COTTON MILLS**

---

MANUFACTURERS OF

*Quality Carded  
Cotton Yarns*

12's to 20's

SINGLE AND TWO PLY  
In Warps, Tubes and Cones

---

**SPRAY, NORTH CAROLINA**

SINCE 1902

**LELAND MOORE  
PAINT & OIL CO.**

We Would Enjoy  
**SERVING YOU**

CHARLESTON, S. C.

**DRAYTON MILLS**

---

SPARTANBURG, S. C.

*Fine Cotton and Rayon Fabrics*

---

Selling Agents — **DEERING, MILLIKEN & CO., 240 Church Street, New York City**



---

---

# Pacolet Manufacturing Company

INCORPORATED 1882

PACOLET, SOUTH CAROLINA

Mills No. 3 and 5  
PACOLET, S. C.

Mill No. 4  
NEW HOLLAND, GA.

Mill No. 6  
GAINESVILLE, GA.

*Manufacturers of*

Sheetings • Drills • Twills

Print Cloth Specialties

Sanforized or Regular Finish



**Macon  
Textiles  
Inc.**

M A C O N  
G E O R G I A



**Cedartown  
Textiles  
Inc.**

C E D A R T O W N  
G E O R G I A

**WATTS MILLS**

LAURENS, SOUTH CAROLINA



Rayon Fabrics



J. P. STEVENS & COMPANY, Inc.

Selling Agents

44 LEONARD ST. AND 1410 BROADWAY  
NEW YORK, N. Y.

*Greetings!*

to

TEXTILE BULLETIN

on its 35th Anniversary

**UNION BLEACHERY**

GREENVILLE, S. C.



# American Enka Corporation\_\_\_\_\_

Manufacturers of  
FINE RAYON YARNS  
For Weaving, Knitting  
and Hosiery Trades

\_\_\_\_\_Enka, N. C.

# WENNONAH COTTON MILLS COMPANY



LEXINGTON, NORTH CAROLINA

# SPINDALE MILLS, INC.



COMBED SHIRTINGS  
AND DRESS GOODS



SPINDALE

NORTH CAROLINA



*China Grove*

COTTON

MILLS

High Quality  
Combed Yarns

THREAD YARNS A SPECIALTY

Combed Peeler and Sak—20's to 80's



China Grove, North Carolina

## Brandon Corporation

GREENVILLE, S. C.

Brandon Plant - Brandon Duck Plant

Poinsett Plant - Greenville, S. C.

Renfrew Plant - Travelers Rest, S. C.

Woodruff Plant - Woodruff, S. C.

*Manufacturers of*

*Print Cloths, Broadcloths, Sheetings, Bag Goods,*

*Duck, Bleached and Dyed Print Cloths,*

*Broadcloths and Sheetings*

*Selling Agents*

**WOODWARD, BALDWIN & COMPANY**

43 Worth Street

New York, N. Y.

**Congratulations to Textile Bulletin on their 35th Anniversary**

**ATLANTA BRUSH COMPANY**

ATLANTA, GA.

Designers and Manufacturers of  
"BETTER BRUSHES FOR EVERY TEXTILE NEED"

SERVING THE TEXTILE INDUSTRY SINCE 1912



# EAGLE & PHENIX MILLS

ESTABLISHED 1860

Twills - - - - Gabardines  
Glove Flannels - - Thread  
Rope - - Shirting Flannels  
Suedes

COLUMBUS, GEORGIA

## Columbus Mfg. Co.

*Wide and Narrow  
Industrial Sheetings  
Print Cloths*

COLUMBUS, GEORGIA

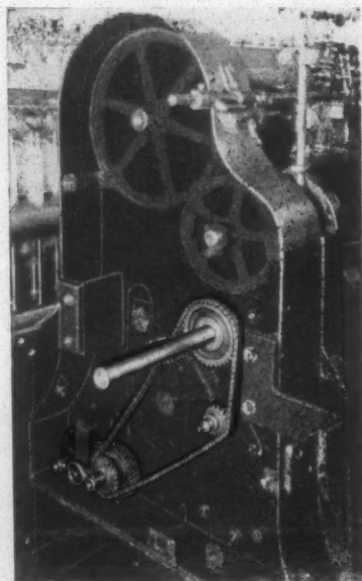




# **The PRECISION Compound and Chain Drive** **Eliminates Loss and Gain in Roving Frames**



Leakproof housings keep oil off your frames, floors and yarn. Drain and refill only **FOUR** times a year. Precision Compounds **NEVER** leak.



*SPINDLE CHAIN DRIVE*

**BOBBINS AND SPINDLES START SIMULTANEOUSLY** as both are driven from the jackshaft . . . all gear sleeves and bearings in the **PRECISION Compound** rotate in the same direction with the jackshaft.

**ENDS STAY PUT** regardless of starting and stopping speeds, because both bobbins and spindles operate independent of the cone belt.

**LAG, BACKLASH, BREAKAGE AND STRETCHED PLACES ARE ELIMINATED** because the Precision Compound, designed as a *complete drive*, achieves positive transmission of power, with equal tension on both bobbins and spindles from the first to the last layer of yarn.

***Super Draft Equipped Frames Need Precision***

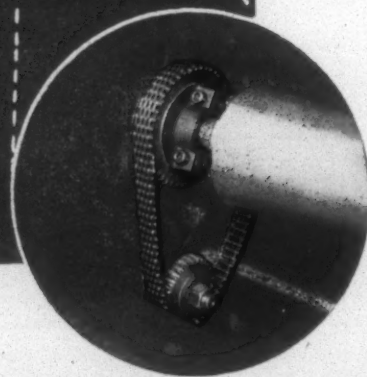
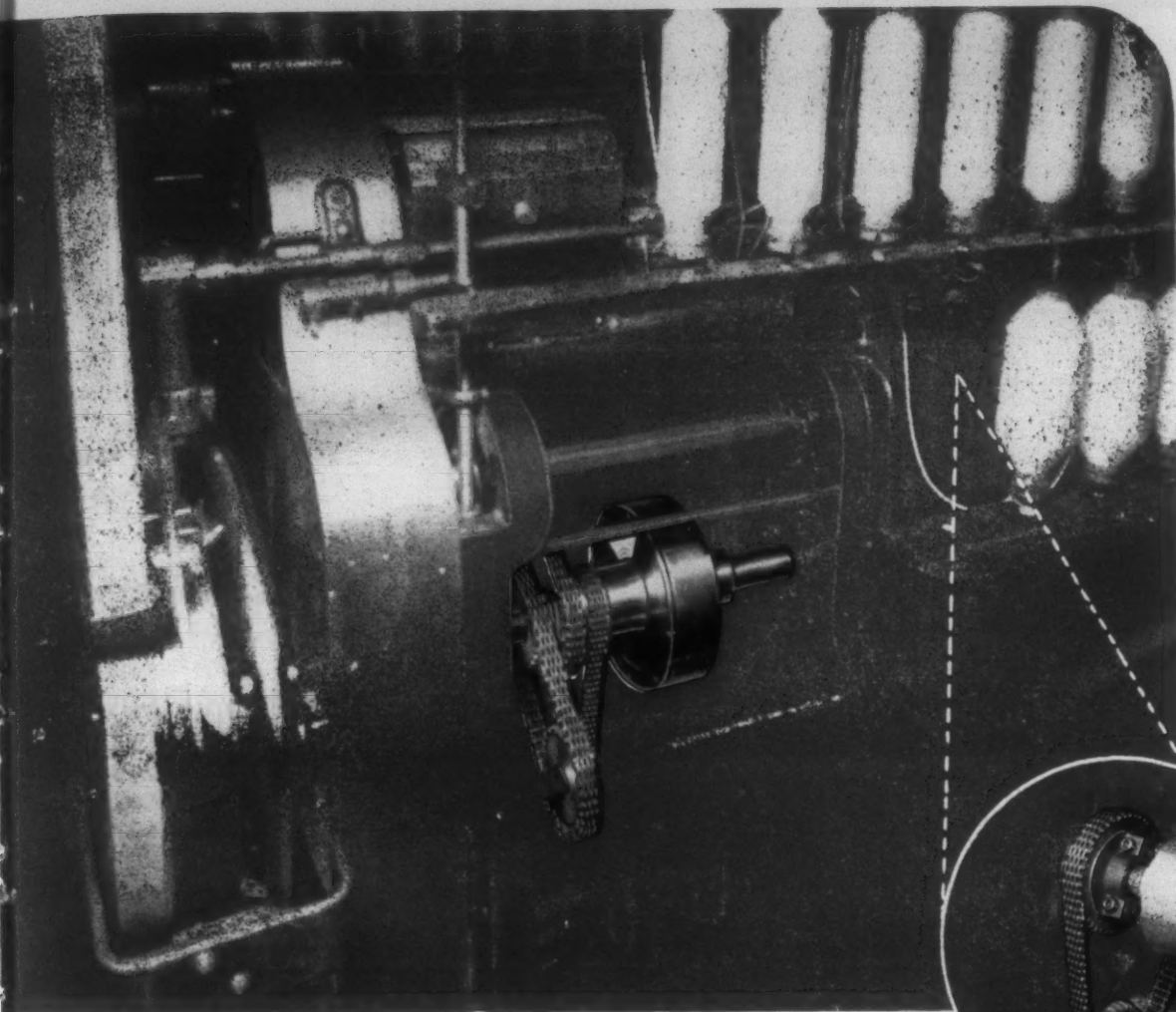
---

**PRECISION GEAR & MACHINE CO.**

2001 NORTH TRYON STREET, CHARLOTTE, N. C.

---





*TWIST CHAIN DRIVE*

### ***Floating Power for Roving Frames***

SINCE 1928 thousands of Precision Compounds have been in use in leading mills throughout the South. They are unexcelled for Whitin, H & B, Saco-Lowell, Woonsocket, Lowell, and Saco Pettee roving frames.

The Precision Compound offers Higher Quality Yarn . . . Smoother Operation . . . Fewer Ends Down . . . Low Initial Cost . . . Lowest Maintenance Cost.

Phone, write or wire for list of mills now using the "Precision."

In hundreds of applications, The Precision Compound and Chain Drives have enabled the mills to speed up their frames; thereby giving greater production without sacrificing the improved quality which The Precision Compound gives.

***Compounds Now More Than Ever Before***

**PRECISION GEAR & MACHINE CO.**

2001 NORTH TRYON STREET, CHARLOTTE, N. C.



Travora  
Manufacturing  
Company.

~~~~~  
**Colored  
Cotton  
Fabrics**  
~~~~~

GRAHAM, ALAMANCE COUNTY  
NORTH CAROLINA

Alice  
Manufacturing  
Company

=====

**PRINT  
CLOTHS**

=====

Easley, South Carolina



**ALGODON MANUFACTURING CO.**

INCORPORATED

**BESSEMER CITY, N. C.**

Quality Carded Knitting and Weaving Yarns Direct, Bleached Bottom Pastels,  
Vat and Developed Colors Package Dyed

SALES DIRECT — PACO TEXTILES, Empire State Bldg., New York City





# The DAVID BROWN CO.

## LAWRENCE, MASSACHUSETTS

FOUNDED IN 1883

*Manufacturers of*  
"HIGH GRADE"  
Bobbins, Spools, Rolls,  
Cones, Skewers and  
Shuttles

of every description  
FOR TEXTILE MILLS

---

SOUTHERN REPRESENTATIVES:

---

Greenville, S. C. . . . .	Ralph Gossett and Wm. J. Moore	Blanco, Texas . . . . .	Russell A. Singleton & Sons
Griffin, Ga. . . . .	Belton C. Plowden	Gastonia, N. C. . . . .	Gastonia Mill Supply Co.
	Spartanburg, S. C. . . . .	Montgomery & Crawford	



**HART**

COTTON MILLS, Inc.

★ *Manufacturers of*  
**Convertible  
Cotton Cloths**

TARBORO, NORTH CAROLINA

SOUTHERN *Weaving* COMPANY

GREENVILLE  
SOUTH  
CAROLINA

*Manufacturers of*  
**Non-Elastic Narrow Fabrics, Tapes and Webbing**  
**Dyed and Bleached**

**MATHEWS MILL**

GREENWOOD, S. C.

**GREENWOOD COTTON MILL**

GREENWOOD, S. C.

**NINETY-SIX COTTON MILL**

NINETY-SIX, S. C.



*Cotton and Rayon Fabrics*



Colored Cotton  
and Merino  
Knitting Yarns

+

Jacquard Velours  
and Tapestries

**STATESVILLE  
COTTON MILLS**

STATESVILLE, N. C.

**THE  
SALISBURY  
COTTON MILLS**

**SALISBURY  
NORTH CAROLINA**



Manufacturers of

Colored  
Goods

COMPLIMENTS OF



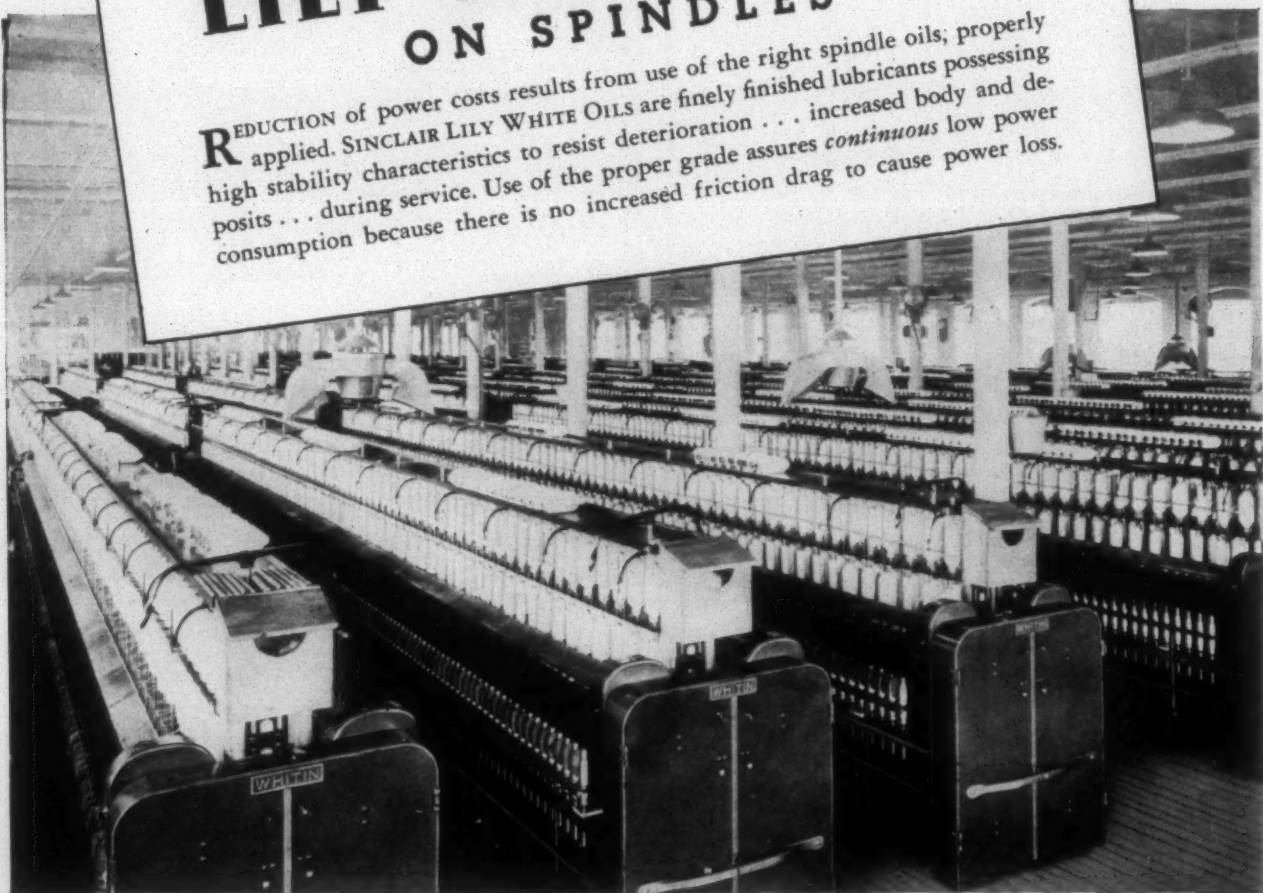
MILLS AT SPINDALE, NORTH CAROLINA  
SALES OFFICE: 450 SEVENTH AVENUE  
NEW YORK, N. Y.



# FOR LOW POWER CONSUMPTION

## LILY WHITE OILS ON SPINDLES

**R**EDUCTION of power costs results from use of the right spindle oils; properly applied. SINCLAIR LILY WHITE OILS are finely finished lubricants possessing high stability characteristics to resist deterioration . . . increased body and deposits . . . during service. Use of the proper grade assures *continuous* low power consumption because there is no increased friction drag to cause power loss.



BESIDES contributing to low power consumption SINCLAIR LILY WHITE OILS help reduce maintenance cost by promoting long bolster life. Their worth was proven in many plants during the war years when mills were operating at top capacity and replacement parts were difficult to obtain. LILY WHITES come in viscosities to suit all operating speeds. Our lubrication counsel is available in solution of your problems.

## SINCLAIR TEXTILE LUBRICANTS

FOR FULL INFORMATION OR LUBRICATION COUNSEL WRITE SINCLAIR REFINING COMPANY, 630 FIFTH AVENUE, NEW YORK 20, N. Y.





## OBSERVING A BIRTHDAY



**T**HIS issue of Textile Bulletin (Volume 70, Number 2) originally was scheduled for publication as a combination Southern Textile Exposition and 35th Anniversary Number. Developments during the past month, however, have forced postponement of the 15th Southern Textile Exposition at Greenville, S. C., thus restricting this issue to celebration of TEXTILE BULLETIN's 35th birthday.

Our 35th Anniversary Number, on following pages, features a number of special articles dealing with developments in manufacturing and processing during the war and how these developments, along with economic and legislative factors, may affect the textile industry's future.

C. T. Revere states that the outlook for stability in the American textile industry might be promising, with the future both nearby and long term dependent upon labor conditions and the pricing policies in respect to wages and goods which may be proposed in Washington. Claudius Murchison discusses the increasing reorganization of the textile industry's structure—the trend toward integration. Charles A. Cannon summarizes the industry's bouts with the Office of Price Administration and offers pertinent suggestions relative to price controls. W. Ray Bell sees a possibility of stability in textile manufacturing never before attained during years of peace.

Dr. Frederick T. Peirce points out that the paramount factor in textile research is "to know how to produce the stuff that the buyer will pay for." Textile testing for the consuming public is discussed by Irwin D. Wolf, and efforts in evolving special finishes for military fabrics are described by William M. Lee.

Separate articles describe the problems faced by the wool industry, new fields for glass fibers, and rayon's efforts in tire cord manufacture.

An entire issue, let alone one article, couldn't begin to tell the story of particular Southern textile mills during World War II. "The War Years at Dan

River" lists the accomplishments of a typical—and outstanding—textile organization, and describes its reconversion activities.

E. G. Padgett and W. G. Marks discuss safety programs in the textile industry, and what "Color Conditioning" can do to further such programs is brought out in another article.

A special article in TEXTILE BULLETIN's regular dyeing and finishing department will refresh readers' minds as to the history of the American dyestuff industry and its present independent status.

This 35th Anniversary Number includes the regular section devoted to new equipment, supplies and literature, but this time it carries numerous descriptions of items which would have been shown at the 15th Southern Textile Exposition had it been held this spring.

### Next Show Likely in 1948

As it stands now, the next Greenville textile show will take place in the spring of 1948. The management of Textile Hall Corp. has been informed that a majority of exhibitors who have signed contracts for floor space in the 15th Southern Textile Exposition prefer to wait until this time next year before definitely announcing a new date. This matter will be brought up for approval before the annual meeting of Textile Hall Corp. directors in June.

The Textile Exhibitors Committee, as it is known, stated following a meeting held March 2 that it was unanimously opposed to holding a textile show earlier than 1948, and that arrangements for an exposition at that time should not be discussed until April, 1947.

Fifty-seven per cent of the exhibitors, measured by floor space for which contracts had been signed, voted for postponement of the show scheduled for the week of April 8-13, this year.





# THE TEXTILE TRADE'S POTENTIAL STABILITY

By C. T. REVERE

Laird, Bissell & Meeds, New York City

**I**N a recent editorial on the subject of wages and profits in the textile industry, the *New York Times* commented as follows:

The new wage-price executive order makes provision for higher prices where necessary to compensate for higher wages. However, Mr. Bowles made it clear in his statement before the House Banking and Currency Committee that few price increases are anticipated, because the level of profits is substantially greater than in the 1936-39 period. In other words, until profits drop below the level of those four years no price relief can be obtained. This is true even though the volume of sales is substantially greater than in that pre-war period. The standard set for "profit relief" is significantly different from that set for "wage relief." A few figures will demonstrate this point.

Prior to V-J Day straight-time hourly earnings of manufacturing workers had increased almost 40 per cent as compared with January, 1941. Even after allowing for some reduction in straight-time hourly earnings because of the modification of special war-time factors, it seems certain that straight-time hourly earnings were some 35 per cent above the pre-war level. These latter figures make no allowance for the recent wave of wage adjustments. Under the new policy, which sanctions the general pattern of wage increases which have been granted since V-J Day, an additional 15 to 18 per cent rise in straight-time hourly earnings will be possible in many cases. After allowing for a general increase of this magnitude, average straight-time hourly earnings will be more than 50 per cent above the pre-war level.

In contrast to this standard for hourly wages is that set up for profits. Despite the depressed level of profits during the years 1936 to 1939, those years continued to be the test for price adjustments. Only if wage increases force profits below the 1936-39 level are price adjustments to be permitted. In effect, the new policy states that so long as straight-time hourly earnings are not 50 per cent above the pre-war level—in some industries it will be more and in others less because 50 per cent is the national average—and as long as profits are not below the pre-war level, wage increases will be permitted and cannot be compensated for by price increases.

The foregoing in certain respects may seem somewhat cryptic, but such obscurity as exists may be attributed to current economic conditions, particularly as they apply to textiles. Both mill and manufacturing groups express general approval of the plan for increasing low-priced cotton clothing, but take the view that this would depend on an adequate price for mills and on methods set up for the channeling of goods into distribution. W. Ray Bell expressed the opinion that if the price relief proposed was adequate, it would stimulate increased production of the lower priced goods. He also took the view that the soundness of incentive pricing would depend largely on whether it was sufficient volume. The extent of the price relief will determine whether the output of the low-priced goods

might be increased through the operation of the third shift.

It thus may be seen that while certain elements of uncertainty still exist, the outlook for stability and also to some extent for price improvement is promising, with the future both nearby and long term dependent upon labor conditions and the pricing policies in respect to wages and goods that may be proposed in Washington.

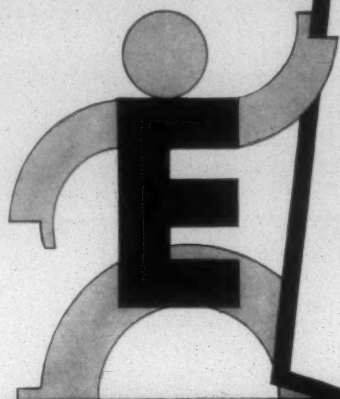
In several fundamental particulars, the outlook for the cotton textile industry is favorable, especially throughout the Southern mill district. In fact, as time goes on, the prospects are fairly promising for a period of stability and increasing activity. In taking this optimistic view, it seems desirable to present a few basic factors inherent in the situation. Although our textile industry has had its troubles, and there have been enough misgivings to prevent glossing over, it must be admitted that few of our major industries have been less subject to dislocations incident to these unsettled times.

It is probable that several special conditions have contributed to this state of affairs. For one thing, a large portion of the industry consists of units scattered through separate localities in the South. Two distinct advantages accrue from this circumstance. In the first place, unrest provoked by union labor agitation has a less fruitful soil for its propagation and spread. In the second place, the element of human relationships has more of a chance to further a better understanding between employer and employee. In this particular there are several aspects worthy of social and economic consideration; for example, the mill executive in the South has a better opportunity for sympathetic appreciation of the problems of the producer. In many cases he was a farmer before he became a textile operative, and he therefore can view the conditions confronting the grower, as well as the position of his present operatives, with more sympathy than the executive before whom these conditions come virtually as "cold turkey."

For these reasons, unless the farm bloc gets busy and through political manoeuvring develops into a pressure group largely for its own advantage, to force higher prices, there will be less opposition to higher prices for raw materials than in certain other industries.

Another feature that perhaps should not be overlooked emanates from the fact that the social and economic condition of the mill operative presents certain comparative elements of satisfaction that contribute to less unrest than prevails in certain other industrial groups. Many of them have





STEEL HEDDLES  
COTTON HARNESS  
SELVAGE HARNESS  
"WARDWELL" LOOP & DOLL PICKERS  
PICKER APRONS & CONVEYORS  
"GOODRICH" LOOM HARNESS STRAPPING  
HEDDLE FRAMES  
MAIL HARNESS  
JACQUARD HEDDLES  
MENDING EYES & TWINE  
SLASHER & STRIKING COMBS

**LAWRENCE, MASS.**

Main Office & Plant  
P. O. Box 927  
'Phone—6194

**CHARLOTTE**

(Branch Plant)  
Clifton Watson  
Manager Southern Sales  
P. O. Box 2036  
'Phone—3-7503

**NEW YORK**

W. S. Taylor  
52 Vanderbilt Ave.  
'Phone—Lexington 2-6060

**ATLANTA**

Arthur Harris  
P. O. Box 1982  
'Phone—Main 2543

**CHICAGO**

Albert R. Breen  
80 E. Jackson Blvd.  
'Phone—Harrison 7140

**DALLAS**

R. D. Hughes Sales Co.  
1812 Main St.  
'Phone—C-6283; C-6284

## A 12 IN 1 SERVICE THAT SAVES YOUR TIME AND ENERGY

When the E-Man calls, or when you call him, you can order as many as 12 DIFFERENT PRODUCTS from this one source — all second to none in quality. Think of the convenience and of the time and energy you save. This is a bonus in addition to the performance economy that Emmons Products assure.

Emmons Service is efficient in another way, too, in that there's an E-Man in your vicinity, no matter in which textile area you are located. His address and 'phone number are given here for your convenience. Get in touch with him the next time you need the products he offers.

EMMONS LOOM HARNESS CO., Factories in Lawrence, Mass., and Charlotte, N. C. Branch offices as listed.

EXPORT AGENTS: Storer & Cia., Chacabuco 443-49, Buenos Aires, **Argentina**; A. Polak, 216 Av. Beira Mar, rooms 403 a-d, Edificio Magnus, Rio De Janeiro and Sao Paulo **Brazil**; W. L. Robinson, Casilla 4075, Santiago, **Chile**; C. E. Halaby & Co., Apartado 139, Medellin, **Colombia**; J. M. Perez Pena, Apartado 1611, Habana, **Cuba**; Leo Lenk Ave. Republica Guatemala 4, **Mexico**, D. F. Mexico; Constantino N. Sabal, Apartado 2288, Lima, **Peru**; N. Marvez, Apartado 391, Caracas, **Venezuela**; Storer & Cia, Paysandu 1202, Montevideo, **Uruguay**.



**EMMONS**

**SPINNING & WEAVING  
ACCESSORIES**



come from farms adjacent to mills, and the advantages of regular weekly income, with no managerial risk entailed as in the case of farming, make them less amenable to the exhortations of labor agitators than is the case in many other occupations.

Nor should one overlook the technological improvement that has spread throughout the textile industry in the last few years. In probably no other field, unless it be chemistry, has research been more diligently and effectively employed than in the production of textiles. In fact, chemistry might be said to have developed into one of the most efficient handmaidens of textile production. Whereas it is hardly more than a generation ago when the conversion of the cotton fiber alone into industrial uses was confined to a few score of products, technological research has resulted in the expansion of this list to more than five thousand.

Another feature that augurs well for the future of our cotton textile industry is its healthy suspicion toward centralized government planning and operation as a means of promoting the welfare of the industry as well as the national economy. Fortunately, it still remains constructively individualistic. The common sense of the agricultural element, graduating from the soil to the factory, constitutes a blessed heritage which gives them a sturdy immunity to the millennial pleas of urban agitators.

#### Good Leadership Valuable

In the dissemination of the sound gospel of individual initiative, the Cotton-Textile Institute, under the wise leadership of Dr. Claudius T. Murchison, has proved itself a stalwart exponent of American private enterprise. It requires such devoted and outspoken leadership, giving effective expression to the principles of freedom, to place and maintain our cotton textile industry in its present commanding position. It is fortunate, indeed, that our cotton textile industry has turned a deaf ear to the evils of so-called "planned economy." As a matter of fact, if we will look more carefully into the history of the tragedies, economic and financial, that have caused so much distress throughout the world, we can trace most of this to the progressive devastation wrought by the planners.

In this connection, attention is called to "Fiat Money Inflation in France," by Andrew Dickson White, who died in 1912. Dr. White not only had served as United States minister to Russia and ambassador to Germany, but was professor of history at the University of Michigan and co-founder and president of Cornell University. He had made the period of the French Revolution the object of his special attention. At this time when inflation and/or deflation bulk largely in the anxieties of our people, Dr. White's study stands forth as a warning and a lesson not only to us of America, but to all nations. The Pamphleteers, Inc., 725 Venice Boulevard, Los Angeles 15, Cal., in explaining the resurrection of this incomparable work, say:

Here in this monograph is history, applicable to these very moments in American life. For we have been diluting our money before and during the war and all signs point to its continuance as a prime feature of our national policy.

The experience of France during the Revolution contains so many points of resemblance to the position of our own country that the writer feels that those who wish to undertake a further study should read Dr. White's incom-

parable monograph. Suffice it to say that one general principle underlies this experiment, as well as others that have produced tragic repercussions throughout history. All of them, practically without exception, stemmed from the attempts at planned economy. In planned economy we find the mother of inflation. At the start it is benevolent, seeking helpful reforms, with reliance on Government instead of the people themselves to bring about the advertised objectives. In the initiation of these undertakings, there is no hint of the dangers that lurk in the path. For example, who would have thought that France was running a risk of financial and economic destruction simply because it embarked on the issue of paper currency, with a backing to the extent of only 400,000,000 livres (call it dollars, if you will) when the security offered was the confiscated lands of the church worth many times that figure. Dr. White, in a partial summary said:

My subject has been Fiat Money in France; How it came; What it brought; and How it ended.

It came by seeking a remedy for a comparatively small evil in an evil infinitely more dangerous. To cure a disease temporary in its character, a corrosive poison was administered, which ate out the vitals of French prosperity.

It progressed according to a law in social physics which we may call the "law of accelerating issue and depreciation." It was comparatively easy to refrain from the first issue; it was exceedingly difficult to refrain from the second; to refrain from the third and those following was practically impossible.

It brought, as we have seen, commerce and manufactures, the mercantile interest, the agricultural interest, to ruin. It brought on these the same destruction which would come to a Hollander opening the dykes of the sea to irrigate his garden in a dry summer.

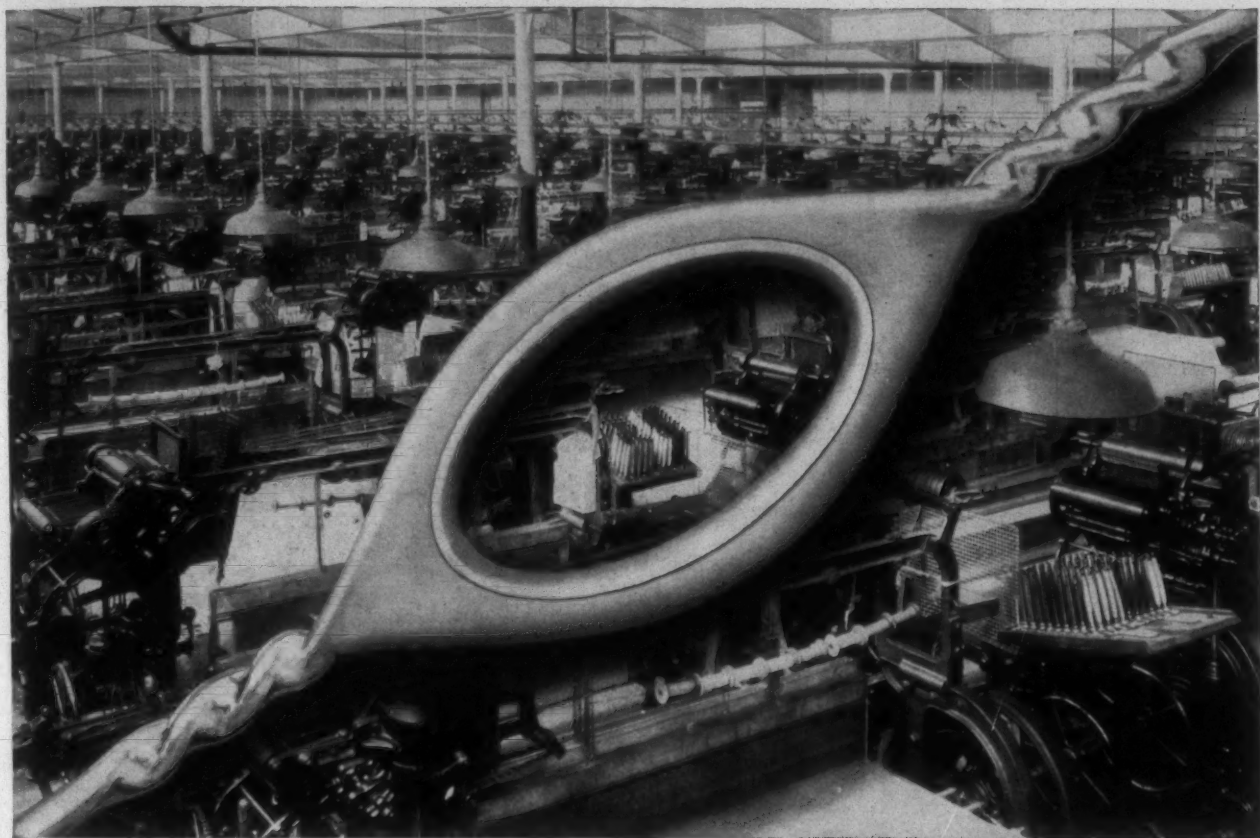
This catastrophe, one of the most appalling in history, was not brought about by the operations of a crew of demagogues and crack-pots. The best brains and the highest spirit of patriotism were invoked in this program. Although there were misgivings on the part of some of those who participated in its inception, it is generally conceded that the ablest financiers of France, which meant the ablest in the world at that time, were among its proponents, advisors and executives. The list of these devoted men constituted the blue book of French financial wisdom of that time. The failure was due to the adoption of a false economy, and it is doubtful if any program under its auspices could have succeeded, no matter how devoted or how able were those who formulated and attempted to implement it.

It is useless to indulge in that futile refutation, "It can't happen here." Many of the same arguments now being invoked were in wide circulation at that time. Some of the phraseology is practically identical with that offered in the days of the revolution. Deficit financing was excused on the same grounds and backed by the same arguments so familiar to us today. For example, it makes no difference how colossal our debt or national deficit, for "we owe it to ourselves, don't we?" Rationing was excused on the same grounds as it is being defended today, and all of it, as stated in the foregoing, stems at the outset from planned economy attempts to improve on the workings of natural laws.

To what extent we may repeat the disastrous experience of France still remains to be demonstrated. The issue, however, must be faced with courage and uncompromising firmness, but thus far we have not shown a willingness to abandon the policy of "soft economy."

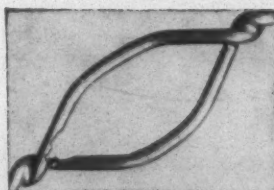


# Reduce wear on Heddle and Warp



## with TUFFER Inserted-eye Heddles

The TUFFER Inserted-eye—  
a smooth, one-piece ring of  
metal—resists wear and gives  
long, trouble-free service. Con-  
trast this with the picture of



Ordinary Twin Wire Heddle

the ordinary heddle. Notice that after a  
period of service grooves begin to appear

which chafe the warp and  
cause broken ends.

TUFFER Inserted-eye Hed-  
dles give longer service and  
smoother operation. They are

available with any size and shape of  
center and end eye and in any size wire.

*Write for samples*



Card Clothing for Woolen, Worsted, Cotton, Asbestos, and Silk Cards—Napper Clothing, Brush Clothing, Strickles, Emery Fillets Top Flats Recovered and extra sets loaned at all plants—Lickerins and Garnett Cylinders from 4 to 30 inches and Metallic Card Breasts Rewired at Southern Plant—Midgley Patented Hand Stripping Cards, Howard's Special Hand Stripping Cards and Inserted-Eye and Regular Wire Heddles.

## HOWARD BROS. MFG. CO.

WORCESTER, MASSACHUSETTS

Southern Plants: Atlanta, Ga., Gastonia, N. C. Branch Offices: Philadelphia, Austin Canadian Agents: Colwool Accessories, Ltd., Toronto 2



# Government Controls and the Textile Industry

Retail stocks of cotton textile items are still short, despite the fact that war ended seven months ago. For an explanation of this from the manufacturer's standpoint we present below an abstract of testimony delivered last month before a subcommittee of the United States Senate Committee on Agriculture and Forestry. The speaker was Charles A. Cannon, chairman of the board of the American Cotton Manufacturers Association, and president of Cannon Mills Co. at Kannapolis, N. C.

I HAVE watched with a good deal of concern the steady decline in the consumption of raw cotton. I have watched this decline translate itself into shortages of much needed cotton textiles. I have never seen a time when the need for cotton textiles and the demand for cotton textiles have been as great as they are today. The people want the goods and the makers of cotton textiles want to furnish them. What then are the reasons why these goods are not being supplied? What accounts for the sharp slump in cotton consumption. Something obviously is radically wrong.

Undoubtedly mistakes have been made with regard to exports but it is here on the home front that the major mistakes are being made, the mistakes that have cut the consumption of cotton so sharply in the past three years. These mistakes are made with a zeal and obstinacy that are worthy of a better cause. The Office of Price Administration, and to a lesser extent the War Production Board and its successor, the Civilian Production Administration, have been the czars of the cotton textile industry for the past several years. I am sorry to say that the O.P.A. has ruled like a czar. It has been arrogant, high-handed and short-sighted. It is my considered judgment that the major portion of the responsibility for the decline in cotton consumption and the shortage of cotton textiles traces directly back to O.P.A.

I am aware that O.P.A. attributed most of this decline to manpower shortages. The decline in manpower throughout the war years has been evident. Certainly, some of it, a large part of the shortage, was due to enlistments in the armed services and to the competition from other war industries. Yet, the war is over; men are returning to the textile mills and yet the decline continues.

The peak of production during wartime was attained through overtime operations, third-shift operations and other operations that required additional labor and expense. The 48-hour schedule maintained during the peak of cotton textile production involved the payment of all hours over 40 at time and one-half rates. Sunday operations involved double time and third-shift operations frequently involved a premium payment. There is a definite handicap today which leads to the elimination of third-shift operations, to the elimination of overtime and double time, and the hiring of as few men as possible. O.P.A. pricing policies result in curtailing employment in textile mills, whether that is the

By CHARLES A. CANNON

intention or not. By the same token, they are curtailing the consumption of cotton and the production of badly needed cotton textiles.

## What Has Happened

Let us review briefly some of the things which have taken place in the production of cotton textiles since 1941.

Here are some of the reasons—some of the big reasons—why the consumption of cotton has declined and why cotton consumption has fallen from over 11.4 million bales in 1942 to a rate averaging about 8½ million bales during the last six months of 1945: Since October, 1941, the daily average price of cotton has risen from about 16½ cents to approximately 26 cents. This is an increase of around 60 per cent. Wages advanced from a minimum of 37½-40 cents per hour in Southern textile mills to a minimum of approximately 65 cents. At the same time, the cost of machinery and supplies has been rising also.

I think the price of cotton should have advanced. I think the wages of labor should have risen. But if O.P.A. wanted full production from the cotton textile mills, the ceilings on cotton textiles should have risen in proportion. As I see it, O.P.A.—that is, the O.P.A. policy makers—have no understanding of the textile industry or its problems. Otherwise, why would O.P.A. insist so strenuously upon controlling profits in a definitely sick industry. From 1925 through 1939 the industry faced problems that resulted in the liquidation of one million spindles per year.

But O.P.A. has a particular reason to be angry at the cotton textile industry. Like *Oliver Twist*, the cotton textile industry went to O.P.A. in 1944 and asked for more. Not only that—it got more. Congress enacted the Bankhead-Brown Amendment. The amendment, however, passed in spite of the most stubborn opposition O.P.A. could muster. The amendment directed separate pricing standards for the major cotton textile items. The ceiling price on each major item was to be computed as follows: (1) the parity cost of cotton, (2) the cost of conversion, and (3) a reasonable profit.

Before the passage of the amendment, O.P.A. took the view that it did not have to increase a price ceiling on a cotton textile item to reflect increased costs. When the industry first asked for relief, O.P.A. replied that none would be given because the industry, taken as a whole, was earning more money than it earned in 1936-1939. Not until the industry earned less money than in the base period, according to O.P.A., would relief be given on an individual ceiling. To anyone acquainted with the textile industry it was obvious that this profit formula, the "strait jacket" net worth formula, was a square peg made to fit a round hole.

The textile industry is a multiple-profit industry. It processes rayon, wool, cotton and other fibers, or combina-





## *This* MARKET IS LOST TO COTTON BUT NEW ONES CAN BE HERE TO STAY!

The voluminous petticoats, camisoles, pantelletes, long sleeved nighties and torturous corsets — so popular with the fair sex in the "good old days" — are not wanted by the free-striding women of 1946. But if cotton is no longer needed to make these out-dated "unmentionables", the demand for cotton is by no means on the wane. Many new products are now being made from cotton fibers.

Our expert technicians, working in the Railway Supply laboratories, have succeeded in adapting cotton fibers to many complex new end-uses. However, only

clean, carefully handled fibers can be satisfactorily employed in these new processes. For that reason, it is important that sweeps and other foreign matter be kept out of the bales. It is also essential that the bales be shipped in clean, well swept, sealed cars to prevent contamination from cinders and road dirt.

The many farseeing cotton mills, cooperating with us in this necessary improvement program, are helping to satisfy valuable new customers and to build profitable, more stable future markets for us all.

### The RAILWAY SUPPLY & MFG. CO. and Affiliates

Specialists in Grading, Marketing and Processing Cotton Fibers

General Offices: Cincinnati, Ohio



Plants and  
Sales Offices:

Cincinnati, Ohio  
Franklin, Ohio  
Atlanta, Ga.

Charlotte, N. C.  
Covington, Tenn.  
Greensboro, N. C.

New York, N. Y.  
Chicago, Ill.  
Detroit, Mich.

# RAYCO COTTON FIBERS



tions of these fibers. Some of the yarn which it spins goes into relatively high cost products; some into low-end goods. If the makers of print cloth, for example, are losing money on this construction it does not help them to be told that the entire textile industry is earning money.

From the beginning, the manufacturers of cotton textiles have told the Office of Price Administration that production would decline unless the mills were given sufficient profits to stimulate production. If a mill is making a particular product at a loss, it shifts, if possible, into some other product where there is a profit. This is not avarice or greed. It is common sense. Neither O.P.A. nor any other government agency that I know anything about, will set a manufacturer up in business again once he goes broke. Not even if he goes broke, because of O.P.A. price regulations.

Congress, through the enactment of the Bankhead-Brown Amendment, gave the cotton textile industry some measure of relief. This relief has kept production from declining still more than it has declined but it was relief given grudgingly by O.P.A. The administration of the Bankhead-Brown Amendment has been attended by inexcusable delays and O.P.A. consistently has tried to get rid of the amendment. After the passage of the amendment in June, 1944, O.P.A. announced—making allowance, of course, for the usual delays—a formula under which profits on a major cotton textile item were computed on a unit basis. For example, the profit on denims was computed at so much a yard. O.P.A., however, lowered the unit profit below the profit on the same unit in 1936-1939. This penalized production to some extent but a further penalty came later.



Later, O.P.A. decided this unit profit was too good for the textile industry. The price control agency then changed over to the net worth formula for major cotton textile items. It announced that it would regard every major item as an industry and would base the profit allowed on that which was made in 1936-1939.

I thought this formula unfair then and I think it unfair now. I do not see how the cotton textile manufacturers of this country ever can attain maximum production under such a program. It penalizes production. The more units an industry produces, the less the profit O.P.A. allows on a unit. Let us say for the sake of illustration that an industry is making three times as much goods as it made in the base period, 1936-1939. O.P.A. will allow that industry no price

increase so long as it is earning as much, in dollars and cents, as it did in 1936-1939. Three times the production for the same money. Keep in mind also that O.P.A. calculates this dollars and cents profit before taxes.

There was little the industry could do about the net worth formula in 1944. As a matter of fact, for the past several years there has seemed little that anybody could do about O.P.A.

As the sharp decline in the consumption of raw cotton indicates, Mr. Bowles is adopting a course which is injuring the cotton farmer and the entire cotton industry. The history of the Bankhead-Brown Amendment, including the language of the conference report to which I have referred, shows that an increase in the consumption of cotton also was one of its primary objectives. Otherwise, there never would have been any mention of a reasonable profit for cotton textiles.

The cotton farmer has a direct interest in this entire matter and is well aware of it. From the beginning, the Bankhead-Brown Amendment had the support of leading farm organizations and outstanding cotton producers. Cotton farmers and their farsighted leaders see in the extraordinary demand for cotton growing out of the war a rare opportunity to get rid of the surpluses which have depressed prices for many years. I agree that we have such an opportunity, an opportunity we may never have again.

Not only is the O.P.A. adopting a course which is decreasing the consumption of raw cotton, the agency is attempting to depress cotton prices. It is attempting to depress them by inadequate ceilings which beat down prices. It is trying to depress them by threatening to put a ceiling on the price of raw cotton.

I do not need to tell you how closely the price of raw cotton is related to the prices for cotton textiles. Both prices have a direct bearing on the rate of the consumption of raw cotton. O.P.A., by denying adequate ceilings on cotton textiles put upon the cotton mills the apparent responsibility for depressing the market price of raw cotton. Apparently, O.P.A. now is hoping that the mills, caught in a squeeze, will be forced to beat down the price of cotton and relieve O.P.A. of its responsibility for carrying out the Bankhead-Brown Amendment.

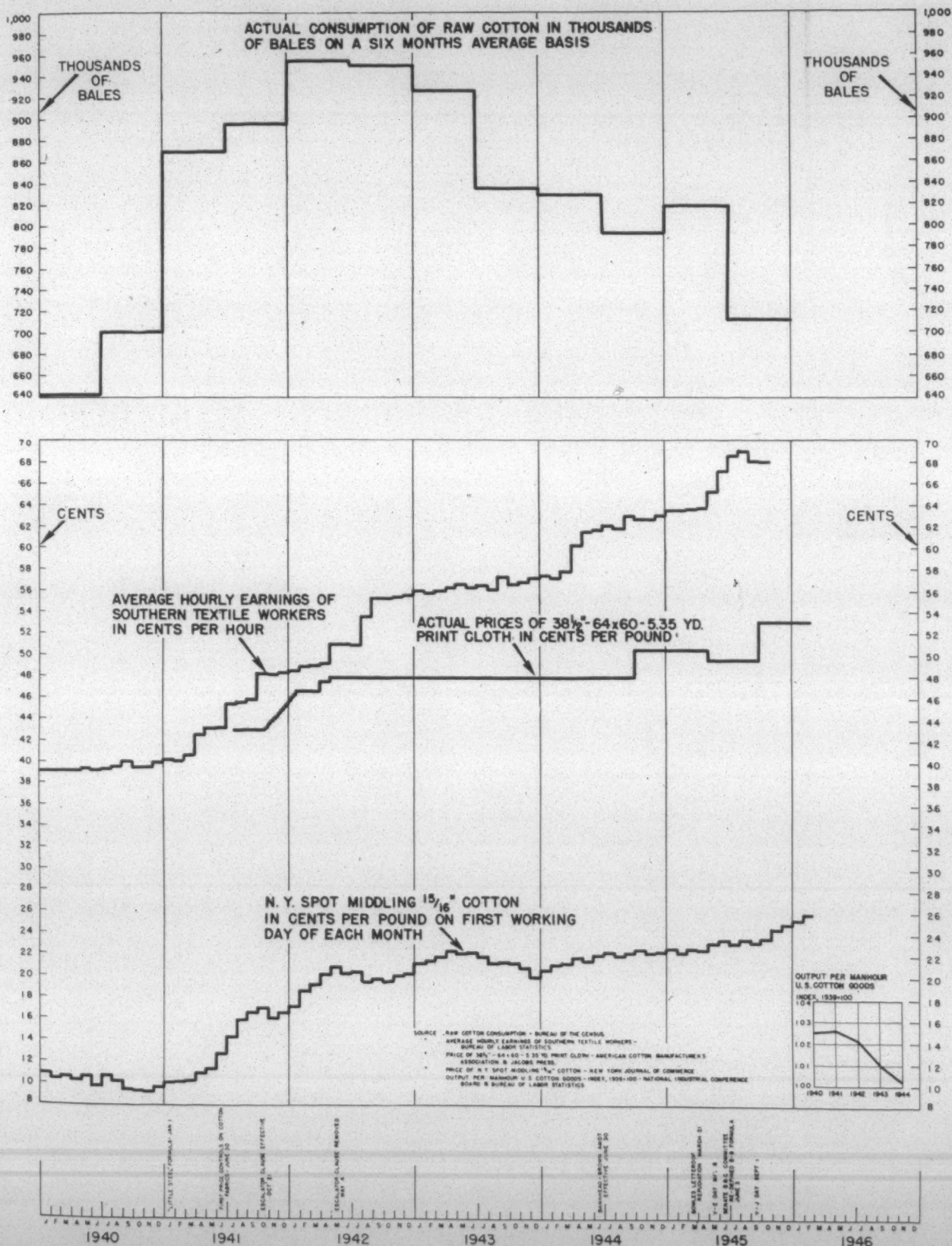
The mills do not want to be put in the position of beating down the farm price for cotton. If the cotton farmers today were receiving price increases in line with the increases given labor, the parity price for cotton would be far above the existing parity. The American Cotton Manufacturers Association has vigorously and publicly stated its position of unalterable opposition to the O.P.A. proposal for a ceiling on raw cotton prices. We are just as opposed to the O.P.A. attempt to use the cotton textile industry as the instrument to beat down prices and thereby rescue O.P.A.

Instead of a policy which curtails production and attempts to beat down the price of cotton, O.P.A. should adopt a realistic pricing policy for cotton textiles and for all other manufactured articles and other services as well. The only way out of the dilemma in which we find ourselves is production. Inflation already is here so far as cotton textiles are concerned. The O.P.A. textile program is a miserable failure. After the clothing situation was already out of hand, the government through the maximum average price plan began trying to channel textiles into low end uses. This has only confounded confusion. M.A.P. has not worked and, in my judgment, will not work. It is my



# —RAW COTTON CONSUMPTION IN RELATION TO WAGES AND PRICES—

Chart Prepared by American Cotton Manufacturers Association, Charlotte, N. C.





considered judgment that the cotton textile industry, the entire cotton industry and the consumers of cotton goods would be better off if there were no O.P.A.

I stated that O.P.A. had displayed a consistently hostile attitude toward the textile mills. In an order issued only this week, M.P.R.-127, O.P.A. hits at the mills by lowering their margin for converting textiles by comparison with the margin of converters that do not weave the gray goods. O.P.A. pricing regulations forced mill after mill to go into the business of converting in order to make any profit at all. Now, the price control agency comes along and penalizes the mills for something which it forced the mills to do.

I predict that the existing situation will grow worse instead of better unless Congress steps in and tells O.P.A., in unmistakable language, to change its ways. All of us, I believe, have the same objective—abundant production of textiles at prices fair to all concerned. Toward that end, I would like to make the following recommendations:

1. That the exportation of cotton textiles be confined to the goods needed for essential relief.

2. That O.P.A. be forced to discontinue programs which clearly discriminate against the cotton textile industry and which penalize production. Among these programs, I would include the maximum price average plan, and M.P.R.-127.

3. The abolition of the industry earnings standard and the substitution of a pricing formula which will encourage instead of discourage production.

4. The speedy and efficient administration of the Bankhead-Brown Amendment in conformity with the spirit and letter of the law.

Extensive O.P.A. propaganda has emphasized the possibility that the lifting of ceilings on cotton textiles will cause inflationary increases in cotton textile prices. The truth is, however, that the increase in prices will be no greater than is necessary to correct the errors already made by O.P.A. to bring about definitely increased production and take cotton textile fabrics and garments out of the hands of the black market and return them to the shelves of honest dealers. Honest dealers will do a better job of holding down prices than will the black market.



## Increasing Changes in Structure

By DR. CLAUDIUS T. MURCHISON  
President, Cotton-Textile Institute

THE cotton textile industry now finds itself in the enviable position of being able to look back upon five years of solid accomplishment that few industries can duplicate. From the same vantage point it confidently faces the future, knowing full well that an industry that rose to every emergency in the war and reconversion periods can certainly withstand the strains and pressures bound to mark the slow emergence into a peacetime economy.

That the industry made a substantial contribution to the winning of the war is well known but it is little realized how many difficulties it had to overcome in order to do so. Some of these difficulties were unavoidable, but many were due to lack of knowledge of the many complications of cotton goods manufacture and distribution in the various Federal control agencies.

In the current welter of reconversion problems the war years seem to have receded into the distant past. Yet it was less than a year ago that the industry was at the peak of its wartime activity from the standpoint of military contracts. It was supplying the armed forces with a myriad of cotton products, many of them of a specialty character, at the rate of three billion yards per annum. Indirect military requirements were absorbing about a billion yards. Along with all these highly essential demands came the task of offsetting the sharp decline in burlap shipments from India. Without the millions of yards of cotton fabrics especially manufactured for this purpose, it would have been impossible to pack the supplies so sorely needed by our forces overseas, our allies and our own civilian population.

At the same time mills were called upon to supply the civilian population with enough goods to meet essential

requirements and it must be admitted that all during the war years and afterwards there was no real distress arising from shortages of cottons. All during this period mills were supplying many countries in Europe, Latin America, the Middle East and Africa enough goods to provide their populations with at least a bare minimum of needed clothing.

In order to discharge all these heavy responsibilities, the industry pushed up production to well over 11 billion linear yards in the early years of the war as compared with the peacetime peak of slightly less than nine billion linear yards in 1937. This was done despite the loss of considerable manpower to the armed forces, more than 125,000 workers or one quarter of the industry's personnel joining the Army, Navy, Marines and Air Forces in the first two years of the conflict. Notwithstanding, output was held all during the war at levels well above peacetime averages and although mills were constantly being forced to readjust production abruptly in line with unpredictable shifts in military demand. For instance, the industry quadrupled duck production between 1939 and 1942 and then, following a quick drop in military demand in 1943, was again able by the end of the following year to raise the output of duck and other tentage fabrics to even higher levels in order to meet the demands of the armed forces.

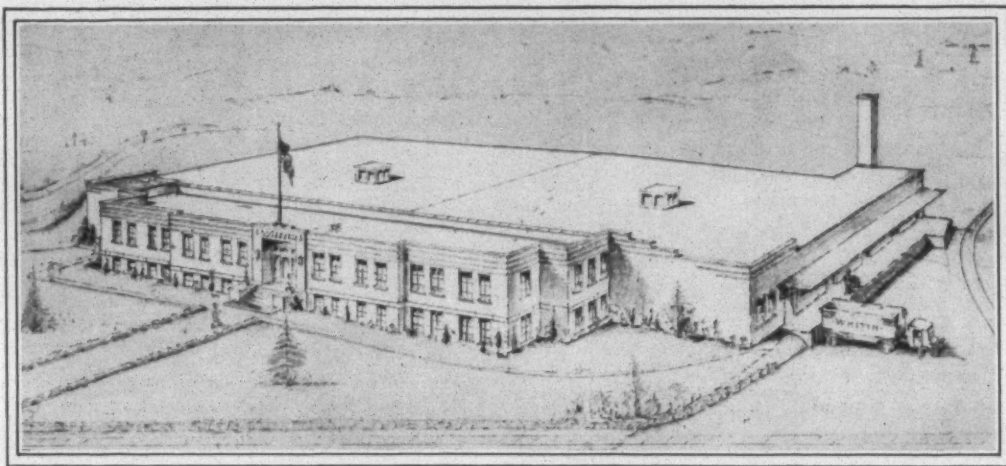
Now the war is over and while certain controls of wartime origin remain the industry is moving surely into the advance stages of reconversion.

Although the scarcity of cotton goods is very great at the moment, and the demand for them undiminished from the war period, it must not be forgotten that the industry's



# Announcement ★ ★

## TO OUR SOUTHERN FRIENDS AND CUSTOMERS



*Architect's drawing of our new office and plant at Charlotte, N. C.*

**WE** are happy to announce that construction is now underway of a new building in Charlotte, North Carolina, to house our Charlotte Sales Offices and Southern Repair Shop.

Our present quarters which have served as the home of the repair shop since 1932 have been found to be inadequate to handle an ever-increasing volume of business. Three times our present floor space will be available in the new building. A large variety of modern machine tools will enable us to give you faster, more efficient repair service. Increased capacity, plus modern equipment, plus skilled workmen, will represent a definite improvement in the service which we shall be able to offer to all users of Whitin equipment in the Southern area.

## WHITIN MACHINE WORKS

WHITINSVILLE • MASSACHUSETTS

CHARLOTTE, N. C.

ATLANTA, GA.



productive capacity is tremendous. The 50 per cent of our huge output which has directly or indirectly gone into military uses during the past three years will shortly be available for civilian consumption, and with a more adequate labor supply the production trend from now on should be steadily upward. To be sure, foreign countries are almost destitute of cotton goods and could easily absorb from two to three billion yards of American textiles during the coming year were the purchasing power available. The practical difficulties that stand in the way, however, will probably limit the export volume to a billion and a quarter or a billion and a half yards at the most. Consequently, eight billion yards or more of cotton goods should be available for the American people during 1946. This is a sufficiently adequate supply to allay any misapprehension regarding inflationary prices even should the price controls be lifted.

### Industry's Prices Held Down

During the war period and since, our price structure has been held down to extremely moderate proportions. This is brought out vividly by contrast with the price situation as it existed during and immediately after World War I.

Speaking in terms of averages, unfinished cloth prices, based on 17 constructions, are now 42.32 cents per pound as compared with 36.78 cents per pound in August, 1941. This represents an increase of approximately 5½ cents a count. During this same period, 1⅝-inch cotton increased more than six cents a pound. From August, 1941, to August, 1945, mill margins actually declined from 20.53 cents per pound to 20.28. This remarkable stability in the difference between cotton prices and gray goods prices occurred despite a sharp advance of 50 per cent in wages. Consequently, with cotton goods now being produced on so close a margin, the likelihood of substantial price declines in cotton goods is indeed remote. As a matter of fact, margins have been squeezed to the point where they gravely threaten production.

Partly as a consequence of these developments, a reorganization of the industry's structure is now in process. This, of course, involves the trend toward integration. For companies that have embarked upon this course, it means the assumption of new responsibilities and risks and puts a premium on the higher skills and ingenuities. It portends a narrowing of the gray goods market and puts in the hands of individual companies the responsibility of commodity pricing through a longer sequence of operations. These, of course, make for increased stability and the industry, as a result, should be less vulnerable to the recurrent storms which have swept over primary markets in past years.

### Decisions Must Be Made

Meanwhile, there are signs that the industry is raising its sights and surveying the external circumstances likely to affect its long-range outlook. More thought is being given to the fundamental changes in the industry's structure that have taken place in the last five years of world upheaval. Since Sept. 1, 1939, there has been a sharp decline in the number of spindles in place, mills now possessing 23,820,574 spindles as against 25,243,366 at the beginning of the war in Europe. Mill managers are now faced with the job of deciding how much equipment to replace and whether or not to expand their productive facilities through operating

multiple shifts or installing more machinery. Decisions of this kind are hard to make and mill owners cannot help but remember the swift expansion in the years after World War I and the long, heart-breaking years when millions of spindles had to be scrapped.

Fundamental changes in the industry's wage structure are also bound to exert a profound influence on manufacturing policies. Higher prices and an unlimited market supported higher wage rates during the war. Once the present vacuums are filled, the industry may be at a competitive disadvantage with other textiles and textile substitutes of both foreign and domestic origin if some of the legislation now being proposed is enacted. There is solid ground for the belief that the rapid progression of wage rates is completely out of line with possible increases in labor productivity and will be an intolerable burden on small mills after normal markets are restored. The industry also is right in its opposition to expanding the power of the industry committees to fix multiple minima covering all workers.

In Great Britain, which is our highest wage competitor, average weekly earnings in July, 1943, for the 48-hour workweek, were 64 shillings and two pence, which would be approximately \$13, or less than one half of the American wage. On the European continent the wage rates run considerably lower than in England. In Japan, prior to Pearl Harbor, cotton mill workers received an average of about 20 cents a day, or 2½ cents per hour. Throughout the entire Far East, the wage rates are generally lower even than those in Japan. Thus, the wage rates in American cotton mills exceed those of our highest wage competitor by more than 100 per cent, and exceed those of our Far Eastern competitors by more than 2,000 per cent. No possible amount of technical efficiency can equalize so great a handicap when our wages constitute 60 per cent of the total value added in manufacture.

### Cotton Will Have To Compete

In connection with raw cotton, many changes have taken place in the last five years. However, the industry is convinced that over the long run cotton must be made available at a market price which is competitive with other materials. This should be done without prejudice to the growers' income. If export subsidies continue to be used to move cotton there must be an equal subsidy on exports of cotton textiles and compensatory duties on cotton textile imports. Greater efforts must be made to reduce the cost of cotton production. Increased research is needed to improve the handling and processing of cotton at all stages of the industry's structure. It is to be hoped that some time the growers will receive their total compensation in the market price of cotton but until that time arrives a way must be found to keep cotton moving through the channels of consumption in free and open competition with the great host of highly competitive and unrestricted materials.

Looking beyond the transition period, the industry has good reason to fear that steps may be taken to sacrifice cotton goods production here in order to stimulate foreign trade in other products of American industry. This situation was described graphically by Fuller E. Callaway, Jr., who said, "There is a dangerous situation which confronts us in the future. We know that farmers, by and large, are in favor of free trade. We know that in recent years our government has expressed itself in favor of free trade. If the



# MODERN INDUSTRIES

## Increase Efficiency by using RCA Sound Systems FOR MUSIC AND COMMUNICATION



Photograph Courtesy of The Cleveland Graphite Bronze Company, Cleveland, Ohio

**Industrial Music Service** helps develop greater efficiency by relieving tension and emotional fatigue...*Scientifically Selected Recordings*, broadcast in the plant at the opening of shifts, and during morning and afternoon fatigue periods, relax and refresh workers at their jobs...*The cheering effect of music* improves employees' attitude toward job and management, boosts morale...*Sound Systems* provide facilities for locating key personnel instantly; for giving instructions and emergency signals; for flashing announcements to all parts of a plant without interrupting work progress.

**RCA Sound Systems**, Centralized Radio and Intercommunication Facilities—for every industrial need. Design sound into your plans for new or remodeled structures. If you need assistance with your project, an RCA Sound Specialist is at your service. Send for free booklet, "Manpower, Music and Morale." Write to your RCA distributor, whose address appears below. Inquiries from states other than those listed should be directed to: Department 68-4, Radio Corporation of America, 530 Citizens & Southern Bank Building, Atlanta, Ga.

### RCA INDUSTRIAL MUSIC SERVICE



**SOUTHERN RADIO CORPORATION**  
1201 West Morehead St., Charlotte, North Carolina  
distributor for North and South Carolina

**THE YANCEY COMPANY, INC.**  
540 W. Peachtree Street, N. W., Atlanta 3, Ga.  
distributor for Georgia, Alabama & Tennessee

### RCA SOUND EQUIPMENT

Control console—contains radio, phonograph and microphone inputs, control and selector switches.



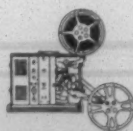
Speakers—wall-cabinet and flush-mounted type for inside use; horn-baffle type for outdoor use.

Microphones—dynamic and velocity types in either table or floor-stand mountings.



Intercom units—for communication between key persons and departments.

Balanced libraries of carefully selected records—for effective music programming.



16mm Sound Projector—for showing training and entertainment films in plant or office.



manufacturers of our country or an overwhelming number of them should now turn over to free trade, it is more than likely that we would get free trade. If this should happen, we textile manufacturers would be hit a double blow, for not only would we be outclassed from the standpoint of low manufacturing cost on the part of our foreign competition but in view of increased production of cotton outside the United States, our government's policy of holding an umbrella over domestic cotton prices and the increased produc-

tion of synthetic fibers throughout the world, our foreign competitors would probably also have the advantage of obtaining their raw material at a lower cost than we would have to pay."

These, of course, are but few of the long-range problems that merit the thought of the industry. If approached with the skill and courage which the industry demonstrated during the war years, the industry, for years to come, will continue to be a major factor in American economic life.



## The Current Evolution in Textiles

By W. RAY BELL, President

Association of Cotton Textile Merchants of New York

OVER six months have passed since V-J Day and the end of the war but the cotton goods markets are still far from being demobilized. In some respects, current and pending restrictions on the freedom of contract are more galling than at the height of conflict. The continuance in peacetime of government controls over prices, production and distribution, by reason of their inadequacies and misdirections, tends to emphasize and even to accelerate changes of a fundamental nature which five years of defense and war effort have been developing within the industry. Because most of these phases deserve the analysis of a separate article, this condensation will attempt no more than to outline some of the major developments which have altered the character, outlook and psychology of the cotton textile situation since the lean days of the pre-war period.

Obviously the chief cause of this evolution in industry status has been an uninterrupted demand for the highest possible levels of production. This is the sixth consecutive year in which ready markets have been available for practically every type of product. Although prime elements of costs—raw material and labor—have more than doubled since 1939 and prices have advanced materially, consumers' income has likewise doubled and the population has grown by approximately 8½ million, all of whom can be reckoned as potential consumers of cotton products. Upon the daily demand of more people with more money to purchase their needs, must be added the depletion of trade inventories and the deterioration of consumer wardrobes and household supplies through excessive wear and tear during the past three or four years when supplies could not be adequately replenished. Beyond these factors in the domestic situation, the vast destruction of war has so crippled the facilities for textile production in many foreign industries that the brunt of their requirements are superimposed upon the already heavy domestic demand. In a nutshell, therefore, the great excess of demand over current prospective supply easily distinguishes the 1946 situation from the pre-war period where the reverse was true.

Under such transformation in basic market conditions, it is not remarkable that the industry as a whole has built

up a record of consistent earnings, commensurate with its essentiality to the public at large. During the war, the vital importance of textile production in this country was recognized as a priceless aid to ultimate victory. Because of the great need for war fabrics of all descriptions, many condemned the shortsightedness of public policies in the pre-war period which not only permitted but forced the liquidation of nearly four million spindles in the 1936-1939 period. In the same four years, the surviving plants in the industry barely eked out earnings sufficient to keep them in business. No wonder that the O.P.A. policy of reconstructing this period as a pattern for present earnings has been roundly denounced by every spokesman for the industry. So far, through the special provisions of the Bankhead Amendment which requires individual pricing on major items, the industry has escaped the full consequence of the "industry earnings" standard although increasingly it has had to assume greater risks which call upon both mills and sales management for a maximum of ingenuity.

Unquestionably the "profit squeeze" practiced by O.P.A. in its pricing of staple gray goods has been the stimulant to the withdrawal of many mills from the gray goods field and their entrance into the finished goods trade by "bridging the converter gap." With converting operations fixed on a more liberal margin of profit and a lesser demand for variety in color, design and pattern, this step has often been a means of preserving the financial integrity of weaving plants. Some mills assume the converting function as a permanent practice and through the acquisition of finishing facilities plan their future trade in terms of the finished product. Others no doubt will participate in both gray and finished goods markets, probably with non-competitive constructions. Still others who are forced into the converting business by the need of maintaining a profit on their operations may eventually return to the gray goods market in the event the margins there become more attractive.

Price difficulties have not been the sole factor in speeding up this increase in vertical integration during the past two or three years. Fabric mills have long envied the producers of household products, such as towels, sheets, pillowcases, blankets, bedspreads and other goods, whose

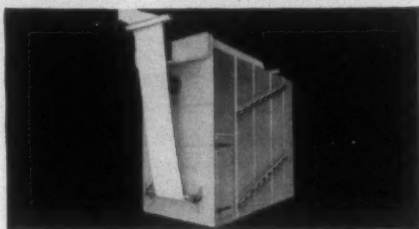


*Engineered*  
TO MEET  
INDIVIDUAL  
NEEDS

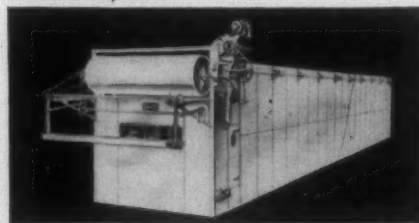


## PROCTOR DRYERS FOR THE TEXTILE INDUSTRY

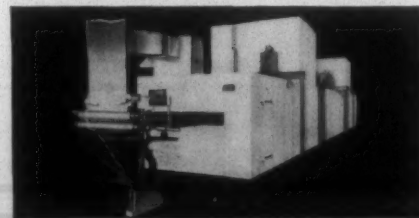
While the textile industry lends itself to a certain degree of standardization in the basic design of drying equipment, actually no two problems are identical. That's why, in supplying drying machinery and curing equipment to all phases of the textile industry, Proctor engineers consider each installation as a specific case and make their recommendations accordingly. While certain basic designs may be applicable to certain basic requirements, many factors may enter the problem. Building layout, output requirements, type of material handled, methods of preliminary and subsequent operations—all may make yours an individual drying problem. It's because of Proctor engineers' background in designing equipment for the textile industry that it pays to consult Proctor & Schwartz first.



Proctor Roller Type Dryer, with individual motor driven rolls. May be supplied as a curer for moderate capacities.



Proctor Loop Dryer for piece goods. High capacity machine that may also be designed to operate as a curer where output requirements are high.



Proctor housing for single run tenter. Unique air-circulation promotes rapid drying and uniformly excellent finishing.

**PROCTOR & SCHWARTZ • INC • PHILADELPHIA 20 • PA •**



processes are controlled up to the point of wholesale and retail distribution. Makers of colored fabrics at least are responsible for their cloth up to the point of fabrication into garments or other articles. The primary conversion of gray goods has likewise been a typical function of many large organizations whose facilities generally include a finishing plant. As long as war controls are still in effect, it is premature to predict in broad terms about the long future. However, it is noteworthy that the forward integration of mills and selling houses has been matched in a number of instances by "backward" integration on the part of converters, shirt manufacturers, dress manufacturers, bag manufacturers, wholesalers and exporters. Most of these developments reflect the pressure to obtain additional

sources of supply. In certain cases the "captive" mills are merely added to already successful vertical combinations and thus become a part of an amalgamation which is becoming more typical within the industry.

It seems clear that these changes in the structure of the industry as a whole cannot fail to have the effect of limiting the scope and volume of the gray goods markets and perhaps transferring volume emphasis to the stage of finished goods. Since the competitive mills of pre-war days stemmed largely from the buyers' dominance of gray goods markets and pressure of competition which favored profitless sales, the future effect of this progressive concentration of production into finished goods areas may well be a stability never before attained in peacetime.



## Trends In Textile Research

By DR. FREDERICK T. PEIRCE, Director of Research  
North Carolina State College School of Textiles, Raleigh

**D**URING the Kaiser's War, there was a keen awakening to the need for more industrial research, both in America and Britain, which was aroused both by striking advances in military technique during the war and by the realization of the advances made in Germany before the war. Government and corporations determined that they would not be caught napping again and they made efforts during the long armistice to set their houses in order. In Hitler's War, the ground work was better laid, but frantic efforts had to be made to get work done by the end of the war which should have been completed before it started. Nevertheless, the advances made through scientific research in equipment and military technique were so striking and so effective on the war's outcome that one would suppose nothing further need be said about the necessity for research.

This is nearly true in that kind of industry which has newly arisen directly from recent scientific research—radios, dyestuffs, metallurgy, resins and synthetic fibers. The American and British chemical industry learned their lesson in the first war and were well prepared for the second. It will be seen, however, that these industries are concerned with *making* new materials or devices, by new techniques without the guidance or handicap of traditional, established methods. When it comes to the peacetime *use* of even new materials to meet old needs by old techniques, the practical man still feels more comfortable with experience rather than experiment.

Farming, clothing and building are the three great fields of traditional method, if one excepts the greatest of all—housekeeping. The old practitioners of these crafts are being pushed roughly by their new neighbors, but are resisting the disturbance to their routine. Consequently, the experts of the new technologies are invading the old fields and are crowding out the old craftsmen. Chemical firms began by offering the products of their research as new, better, cheaper assistants for textile processing; they went on to produce new fibers and are now working on new methods of processing them (such as tow-to-top processing

of rayon staple) and on new materials and articles (such as bonded fiber sheets) to make from them. The old textile craft is rubbing its eyes as it wakes to the vision of markets lost to its wide-awake servant. The steward is founding his own dynasty—Queen Silk is deposed and King Cotton is trembling on his throne. Research on the *making* of new materials and devices is not enough; it must be followed by research on the *handling* and *use* of these new materials and devices. This is the problem facing the traditional farmer, textile manufacturer, builder. It is their problem while they can hold their position by a combination of experience and experiment. Otherwise, their problem will be simplified to that of unemployment, while new industries developed by their researchful servants replace the old.

It is not an easy task to adapt new materials and methods to old needs. Research is comparatively easy when one's objectives are simple needs, such as greater power, speed, load. The engineer knows what he wants and when he has it, even before he leaves the laboratory and design office. The textile man has a harder task, with his complex irregular materials on one hand, the vagaries of fashion and infinite variety of human life on the other.

Getting down to cases in the textile industry, the need for research and the opportunities for development in mill engineering are fairly obvious and simple. The first call of the mill man is for higher speeds, greater production, cheaper materials and processes, less waste. This is a legitimate field of study, which is in no danger of neglect and in which much progress has been made. Indeed, it has gone so far that the quality of cotton goods has often been so degraded that the door has been left wide open to new materials which have their appeal in qualities other than cost. The best rayon cord tire that can be produced for war comes out well in a comparison with the cheapest cotton cord tire evolved in years of peacetime competition. The drive to lower costs must be controlled from fiber to garment by a system of quality control and directed towards the better satisfaction of the consumer by the scientific study



TRADE MARK  
**NON-FLUID OIL** → IN  
 IN U.S. PAT. OFFICE & FOREIGN COUNTRIES

# FIRST

## PLACE FOR ELIMINATING

# SECONDS

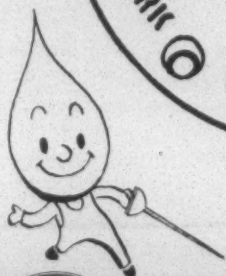
NON-FLUID OIL — the modern lubricant—stays in bearings where it belongs and prevents losses from oil-spot "seconds" caused by dripping, leaking oil.

That's one big reason why NON-FLUID OIL is used by seven out of 10 mills. On top of that, it cuts oil and application costs—outlasts liquid oil from three to five times!

NON-FLUID OIL can't creep from roll necks and get on covers of top rolls. Its use prevents saturation and oil rot of roll covers, eliminates blackened yarn.

Used on looms, NON-FLUID OIL prevents dripping and spattering from bearings with damage to goods in process and waste of oil.

In carding, spinning, and weave rooms, the no-drip qualities of NON-FLUID OIL eliminate oil creepage and spattering that damages goods in process. Write for descriptive bulletin and testing samples.



Southern District Manager  
**FALLS L. THOMASON**  
 Charlotte, N. C.

**WAREHOUSES:**

Chicago, Ill. . . . . Atlanta, Ga.  
 St. Louis, Mo. . . . . Detroit, Mich.  
 Providence, R. I. . . . . Greenville, S. C.  
 Charlotte, N. C.

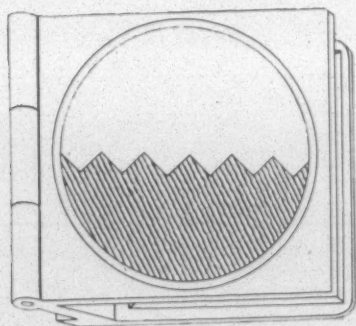




of design and demand. The field of opportunity for textile research may be divided into three parts: fiber production, mill processing, sales promotion; and the greatest of these is the last.

The basic problem is to know how to produce the stuff that the buyer will pay for. The maker of new fibers studies the properties of the old fibers to find what they were wanted for and begins by imitating them. He has developed new methods by which fibers can be given desired properties (molecular tailoring) and more uniform, controlled quality such as the old fibers never had. The producer of the old fibers is faced with a new challenge—to produce his materials to uniform specification, better suited to the methods of modern industry. Both must seek to know more of the qualities that give satisfaction to the consumer, to maintain and extend the market for their particular fibers.

In mill processing, modern methods of production engineering have spread from watches to automobiles, radios and ships. At last they are reaching the textile industry, with an impact all the greater for the delay during which the techniques have been progressively improved and elaborated. Production engineering is a name for a group of techniques created by scientific engineers when they turned from the making of machines to using them in producing consumer goods—testing and specifying raw materials, intermediate products and the finished article, quality control throughout processing, time study and detailed costing of all operations, control by instrumentation of the conditions of processing, automatic machinery, flow of production, design of the factory as an integral unit to do a defined job of production. With it goes research on the behavior and modification of the material as it passes through each operation. In contrast to the old craftsmen who took pride in botching variable lots of raw material through various processes to make a great variety of special products, the production engineer seeks a uniform constant raw material and a factory so automatically controlled that it will turn out a uniform article with a minimum of attention.



The inventions that initiated the mechanization of textile production were the results of research so old that the inventors hardly realize their debt to the scientists, Newton, Carnot, Faraday, Franklin, etc. Even purely mechanical invention has not yet shot its bolt, but it is given a new lease of life by new engineering techniques in electronics, metallurgy, aero-dynamics, even radioactivity. To a limited extent, these are applicable to processes of production but their major effect is in giving more powerful methods of observing and controlling the behavior of the material in process. This greater understanding of the material guides the mechanical and chemical engineer in designing machines

and processes that effect the desired result with less waste, damage and cost or that create new materials and effects. In the cleaning of cotton, carding, drafting, weaving and finishing, the clever devices of the old inventors are found lacking when one examines what is happening to the material in process. They can all be improved in operation by instrumental help in setting and control; and many of them are not so clever. A few key inventions set going the industrial revolution—the fly shuttle, roller drafting, mule and ring frames, the cotton gin. The rest of the series of operations had to follow the new tempo as best they could, with machines imitating the old manual operations, knocking cotton around over a grid, stirring wool about with a broom handle and a tub. The unnecessary repetition of ineffective actions, the waste of time and material, the damage to fiber and the variation of product in some of these operations are understood better by new techniques of examining the products and material in process. The old-fashioned mechanic was very knowledgeable and ingenious about his own job, but he knew too little of what came before and after, the effects on his little operation of the quality of raw material and the conduct of earlier operations, the effects that he produced on later operations and the final product, by his devices for increasing production or even for improving his product, as he judged it. Study of the material as it passes from raw fiber to finished article puts each operation in proper perspective and often condemns practices which save time, labor and material in particular processes, regarded in isolation. Draft organizations and the use of controlled draft systems need critical investigation from the point of view of yarn breakage, cloth quality and sales appeal. Dyeing is affected by drought and mineral deficiencies in cotton fields and sheep pastures, it affects end breakage in weaving, rot resistance in use. A sleazy rayon may pass inspection on the counter but slipping seams will affect future sales.

Garments, not piece goods, are the finished product of the textile industry. New fibers, new processes and new demands raise problems and opportunities for the garment maker. Production engineering has entered this field, too, and will oust the craftsmen to a large degree. It demands closer control and specification of piece goods. Shrinkage, sleaziness and flaws become more serious when patterns are cut en masse and making-up is organized in a production flow. Organized expert buyers demand of garment makers, and through them, of converters, weavers and spinners, that their goods pass muster not only on the counter but in service. Industrial users, such as tire makers, driving belt and conveyor users, demand an engineering standard of performance. All this but leads up to the prime question: What does the user want? The older textile industries have generally left this question to the merchant, but he is concerned with his own profits from the prevailing market rather than with the economic stability and progress of particular branches of the textile industry. Rayon producers have given a lesson to the industry in the effectiveness of the study and cultivation of consumer demand. They do not wait for manufacturers and consumers to discover the latent qualities and advantages of their product.

An enormous amount of thought and work has been put into the design of cloth, garments and clothing ensembles, by millions of women and men seeking adornment, comfort and health and by their advisers, the dress designers and tailors. The resultant craft and art of clothing cannot be



SINCE **STANDARD OF AMERICA** 1892

# ERWIN MILLS

COTTON FABRICS

Erwin is one of the larger textile firms specializing in the production of cotton fabrics. From purchase of the cotton to the finishing of the fabric, every step in production is under control of workers trained in Erwin methods and familiar with Erwin's rigid quality standards.



ERWIN Fabrics include . . . Wide Sheetings, Sheets, Pillow Cases  
 Erwin Superb . . . Erwin White Star . . . Erwin Cooleemee  
 Bleached and Solid Color Flannels . . . Shirting Flannels . . . Interlinings  
 Coverts . . . Suitings



Erwin Bluserge Denim-Sanforized . . . Buckskin Denim . . . Indigo  
 Stripes . . . BluSurf\* Sportdenim\* 36 inches wide . . . Herringbone  
 Suitings . . . Vat-dyed Drills and Jeans



Fabrics Sanforized-Shrunk within 1%.

\*Trade Mark

## JOSHUA L. BAILY & CO., SELLING AGENTS

40 WORTH STREET, NEW YORK 13, N. Y.



ignored, but it needs to be understood and translated into terms that can be measured, tested and specified, in order to adapt it to new fibers, new demands and particularly to the organization of modern industry. Despite ages of experience, the relation of the serviceability of clothing to the construction and finish of cloth and garments is very imperfectly known and what knowledge there is lies in the minds of individual craftsmen, inarticulate and unsystematic. This relation needs to be studied from the point of view of an engineer, who knows the properties of his materials, the conditions of service and the technique of designing a structure to meet known demands, of stress and strain, wear and tear. The war, with its many and varied stern demands on protective equipment gave a great impetus to such studies, which were pursued very effectively in the Research and Development Branch of the United States Army Quartermaster Corps. The quantitative study of garments in use needs to be extended to civilian goods by similar methods. This field of investigation has been left almost entirely to schools of domestic economy, inadequately equipped for the job. It demands the co-operation of the textile technologist, who knows the materials, and the physiologist, who can evaluate the results on the body besides tailors, economists, climatologists, engineers, plant and animal breeders and agronomists.

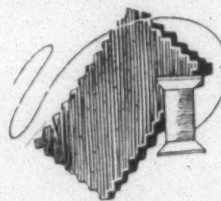


Can all this field of study, from fiber to suit, from scientific theory to sales talk, be covered by one organization under one direction? England thought it could and produced the Shirley Institute, by the co-operation of industrialists with government support. Americans would not concentrate their energies so rigidly but evolved an effective method of co-ordinating the planning of projects and the application of results in the O.S.R.D. (Office for Scientific Research and Development). Concentration of resources and activity in one central laboratory, or co-ordination and stimulation of free investigators by a central bureau—that is a question of organization which must be left for further discussion. (A compromise is of course the answer, as in most questions of policy). In America particularly it has still to be recognized more clearly and widely that some form of co-ordination is necessary, that the applied research, or rather development, which leads to quick returns in profits springs from the advancement of science by the quiet and patient work of creative minds. Industry has grown on knowledge gained as a child gets sustenance from its mother, but it must now set to work to earn and pay for the mental food of its adult life.

Co-operative research poses rather a harder problem of organization than the research, or rather the development, undertaken by a corporation for its own particular advantage; it also develops in a different way. The experience of

the Shirley Institute is almost unique in the scale and period of its operations, and it may usefully be studied by newer ventures in the same direction.

Immediately after World War I the Shirley Institute was started by a group of industrialists who were impressed by the power of science. Some of them belonged to large corporations with research departments, and they wanted the fundamental service that the universities neglected and which they could apply themselves. At the other extreme were small organizations without a technical staff which wanted recipes to develop new discoveries. The backbone of the enterprise throughout has been the medium-sized firms with good technologists but not the mammoth resources necessary to cultivate fundamental studies for private use.



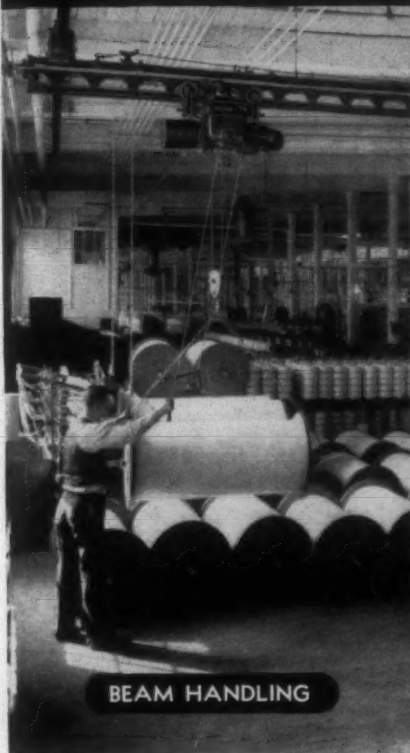
At first the British textile industry had little realization just what science could do for it, and the institute's scientific staff had small knowledge of industrial problems. The institute began with a logical scheme of scientific departments to study cotton, starch, dyes, etc., as might have been done in university laboratories. The industry was not very interested in the chemistry of minor constituents of cotton, the viscosity of starch, the rigidity of cotton hairs or their moisture relations. Things languished a bit. However, a large collection of testing instruments and methods of investigation gradually grew, and the staff began to learn how to use them in understanding the materials and processes of the industry more thoroughly. The volume of inquiries began to swell, the scientists and technologists developed increasing interest in each other's work. At first the industry was concerned with the conduct of particular operations—to use higher drafts, to minimize end breaks, to increase loom speeds, to avoid damage in finishing gray goods. The institute was reorganized into departments corresponding to mill processes, and the scientific divisions were dropped.

Still, the ever increasing success of the institute in the improvement of processes and their control really sprang from a new and keener understanding of the materials in processing, not from the mechanical ingenuity which the industry never lacked. And this greater knowledge of the materials grew from the early ground work in methods of testing, investigation and analysis. The study of processes was more and more purposefully directed toward the efficient production of better materials, and the importance of the market to the industry was realized more clearly. The testing (or physics) department, which had survived the reorganization along processing lines, was distended by demands from the industry and could not keep up with them. So, the scientific divisions are returning.

In effect, the present organization is threefold: a central office block with two wings with two connecting wings, one each for processing and products. The central office includes library, liaison or extension service, workshops, statistical service, etc. The process wing is subdivided according to



# TEXTILE MILLS BOOST EFFICIENCY *with* CLEVELAND TRAMRAIL



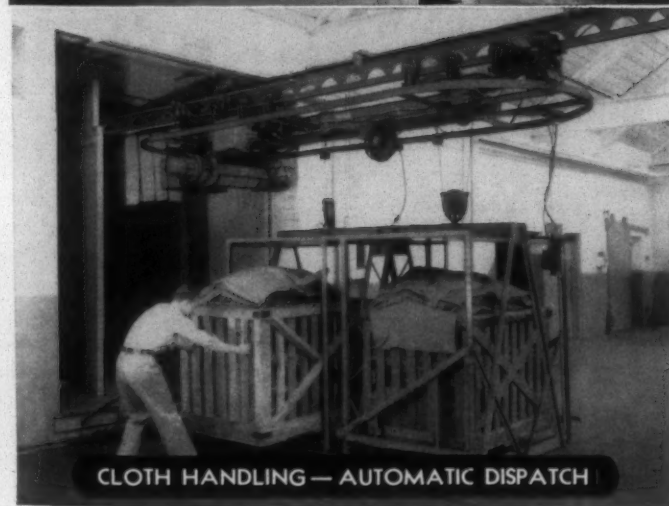
BEAM HANDLING



RAW STOCK HANDLING



PACKAGE DYEING



CLOTH HANDLING — AUTOMATIC DISPATCH

Efficiency — meaning costs and output of product — has been greatly improved in many textile mills with installation of Cleveland Tramrail, even with other production facilities remaining the same.

During the period following the war it is predicted that the use of Cleveland Tramrail will be accelerated tremendously because textile mills will require more efficiency in operation than ever before if they wish to remain in a favorable competitive position.

No other machinery offers as great returns for the small investment required as overhead materials handling equipment.

- Upper Left: MARSHALL FIELD & CO., SPRAY, N. C.
- Upper Middle: PROXIMITY MFG. CO., GREENSBORO, N. C.
- Upper Right: STEAD & MILLER CO., CONCORD, N. C.
- Lower Left: GREGG DYEING CO., GRANITEVILLE, S. C.

MATERIALS HANDLING  
TRAINED SPECIALISTS

CLEVELAND TRAMRAIL CAROLINAS CO.  
DIV. OF

S. R. BROOKSHIRE  
V. G. BROOKSHIRE

ENGINEERING SALES CO.

BUILDERS BUILDING  
CHARLOTTE, N. C.



the succession of industrial operations, while the products wing is organized on the basis of scientific method.

The success of the institute's work with cotton has attracted to it departments for rayon and silk, financed separately. This has helped the idea of outgrowing the traditional limitation to one fiber, and has fostered a comparative study of all fibers so that each may be used or several combined to get the desired finished cloth or effect.

The Shirley Institute has spent some 20,000 pounds annually, equivalent to nearly 500,000 American dollars. Doubling of this financial allocation is now projected in

order to meet demands made on the institute, which is regarded by many a firm as one of its own departments. Even this expansion will not cover all the ground that has been found worth cultivation as long as work is confined to the institute itself. Many aspects of the complete science of fibers may best be pursued in highly specialized university laboratories. On the other hand, practical developments in new machinery involve development work on too large a scale for such an organization. Additional academic and commercial units are needed to supplement this co-operative research.



## Textile Testing for the Consumer

By IRWIN D. WOLF, Chairman  
Committee on Ultimate Consumer Goods  
American Standards Association



I AM sure that retailers are no more anxious than those engaged in textile technology to have a flow of high quality merchandise to pass on to our customers soon again. Many serious problems face us before unlimited supplies of goods of pre-war quality or higher are available for distribution. It seems to me this is an opportune time for us to look back on some of the problems of the past and try to think them out together so that the knowledge, experience and skill of technical association such as yours shall be of greatest value to the distributors of goods and to their customers, rather casually described as the "consumer."

### Testing for End-Use

First of all, retailers have long believed that textile laboratories have concentrated too much on the testing of the materials of which goods are made and too little attention has been given to the evaluation of the end product, the goods bought by our customers. Perhaps we will never be able to determine in the laboratory just what the anticipated use-life of a bed sheet will be; how long a raincoat should remain water repellent under normal useage and cleaning; how many miles a man may walk in a pair of shoes, and how long and through how many washings a boy's wash suit will stand up. These definite figures may never be achieved. Perhaps we don't want to be in a position of telling our customers these estimates even with a limited guarantee. It would be of extreme value to a retail store, however, if its buyers were informed as to an approximation of these service lives so as better to compare the products of one manufacture with those of another and to evaluate the comparative serviceability of their price lines.

For example, as a distributor, I want to know quickly how the warmth of one blanket compares with another. I should also like to know for how long a time under normal useage and washing, these warmth characteristics will be retained. It is entirely possible that in the long run the blanket having the poorer initial warmth retaining qualities might retain it longer and prove to be the better one for our customer to consider at the price she pays.

Also, we anticipate an increased production of lighter weight fabric for outerwear for our customers of all ages

and both sexes. It is one thing for the technologist to evaluate these from the standpoints of tensile strength, shrinkage, color fastness to the elements, and abrasion (whatever this test actually means in terms of wear), but it is quite another for the retailer to know the ability of the garment to stand up in service. We would like to know the ability of the garment as a unit to retain its shape, to withstand reasonable wear, to be readily cleanable, and, if there is some slight color change during service, will this color change be uniform. Coming from an industrial community, perhaps I am more conscious of the cleanability factor than are many other retailers. We have had a sad experience with garments for boy's winter outerwear; the layer of water repellent cotton fabric requires a strenuous washing operation to remove the sooty dirt carried into the fibers by our greasy smoke, but the shearling lining, or the flannel lining, as the case may be, will not stand washing due in one case to shrinkage and in the other, poor color fastness to soap and water. I would hesitate to say that the technologists who developed the water repellent cloth for the outer layer were amiss in recommending it to manufacturers of boy's outerwear, but somewhere a serious error was made and garments, though warm, were unserviceable because they could not be cleaned satisfactorily either by dry cleaning or by laundering methods.

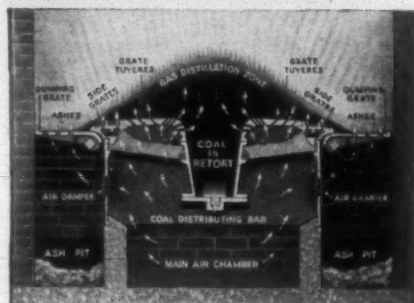
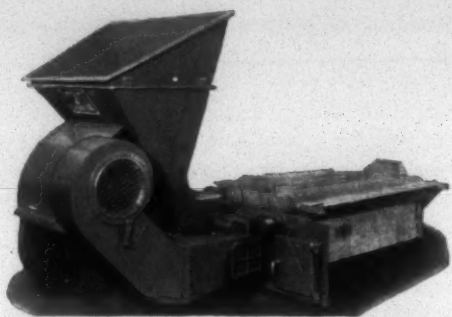
During the war all of us bought what we could get, but even before the war there were numerous cases in which fabrics woven, dyed and finished with one end-use in view appeared in garments requiring entirely different use and exposure. I should like to see textile technologists take a strong stand for the informative labeling of goods to help guide these into the proper channels of manufacture for distribution to our customers.

### New Standards vs. Blitz Goods

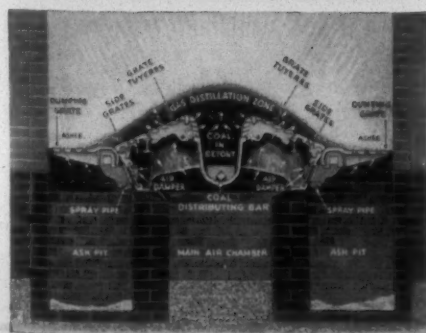
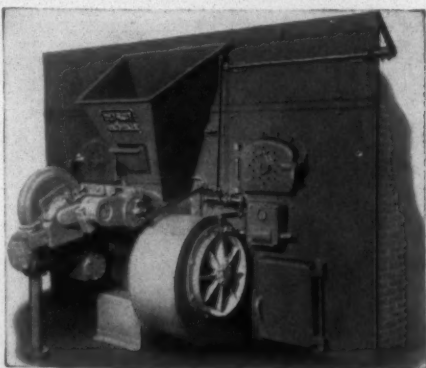
My second point deals with reconversion. I am firmly convinced that our reconversion should be mental as well as production-wise. A great many merchants and buyers have, during the war years, forgotten how good their pre-war merchandise really was. We may be inclined to accept a small improvement over today's goods as being a satis-



# Hundreds of Prominent Textile Mills Use DETROIT STOKERS

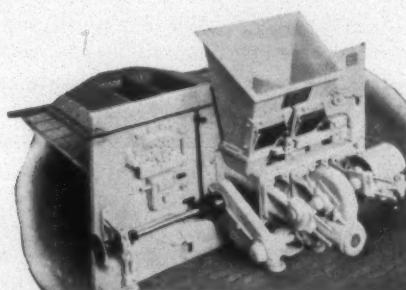


**DETROIT LOSTOKER.** Smaller type of plunger feed stoker for cast iron, steel firebox, tubular and small water tube boilers from 50 to 150 Horsepower.

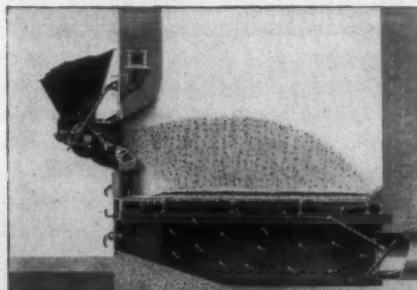


**DETROIT UNISTOKER (With Detroit Adjustable Feed).** Single Retort, mechanically driven, compact unit type, operated by either electric motor or turbine. For 150 to 250 Horsepower boilers.

Over forty years of combustion experience behind Detroit Stokers. The wide variety of types and sizes assures you of a recommendation best suited to your requirements. Hundreds of prominent textile mills depend upon Detroit Stokers for Power, Heat and Process Steam. Buy stokers from the Company whose efforts and resources have been devoted to coal burning equipment.



**DETROIT DOUBLE RETORT STOKER.** A multiple retort stoker with two retorts. Readily applied to existing boilers because of the side cleaning feature. For 300 Horsepower boilers and upward.



**DETROIT ROTOSTOKER.** Spreader Stoker. Burns fine coal in suspension, coarser coal on the grates. Over-Throw Rotors insure uniform fuel distribution. Stationary or Dumping grate types.

## DETROIT STOKERS

**DETROIT STOKER COMPANY**  
General Motors Bldg., Detroit

SEND FOR  
BULLETIN



factory value for our customers. Do you technologists know from your records the pre-war data on the goods woven, dyed or finished by you? Do you know the performance of certain weaves? Do you know the channels of trade to which these goods of specified quality customarily went before the war? As these goods are finished now, are they going to these same industries? Has the war and the inevitable and necessary distortion in quality changed this flow? Do you merchant customers feel confident that manufacturers are providing them with the best goods the market now affords? These are very important questions from our standpoint and from that of our customers.

Reconversion to pre-war standards of thought and of merchandise quality will be slow in many kinds of textile goods. In the meantime we are stocked with an apathy toward quality standards that has seized our minds during nearly four years of war. We have stocks of blitz-goods to dispose of and for which *today* there are eager customers because neither retailers nor customers can get anything better. Unless manufacturers and retailers reconvert to an aggressive merchandise quality stand before the consumer does, we will both be stocked with blitz goods for which there will be no customer demand.

Our goods must be serviceable and fashion-right. We must have them when the customer wants them and in full size, color and style assortments, and within all our pre-war range of price lines. Each of us should consider himself responsible for providing an impetus toward the steady increase in quality and should see that the information concerning the goods is passed onto the next unit in the production-distribution chain until the ultimate customer receives as much information as is useful to her.

### Sale of Wartime Research Developments

My third point is one that deeply concerns retailers and should be of extreme interest to all textile technologists. With the increased tempo of peacetime production all of us are going to be faced with the problem of the promotion of fabrics, finishes and other goods because "the Army and Navy used it during the war." Manufacturers of goods and the retailers who sell them are much more vulnerable to this argument than are you technologists. We have been told so often throughout the war that our Army and Navy were the "best-equipped, best-clothed, best-fed and best-sheltered in the history of warfare," and so many loose promises have been made to us on the results of wartime research that our buyers and our customers are convinced that Army use signifies a guarantee of quality.

We all know that for the sake of procurement, the Army and Navy had at various times to buy and use many products of fair performance. When the development and production of more desirable products reached a high enough level, those of poorer performance were no longer purchased. However, today and tomorrow, we will constantly have before us as a principal sales point "Our product was used by the armed forces." Naturally, we do not expect the A.B.C. Co. to say to us "Our mildew-resistant finish was used exclusively by the Army until the X.Y.Z. product came on the market, at which time ours was dropped from procurement because the fabric deterioration was 50 per cent greater with our finish." Nor would we expect the D.E.F. Co. to say "Our product was used by the

Navy for its wind-resistant and water-repellent jackets, but when the S.T.U. Co.'s permanent finish was available, ours was no longer used because of 30 per cent poorer water repellency."

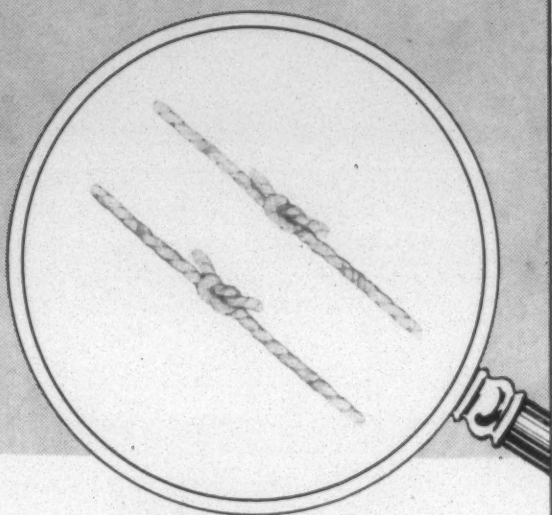
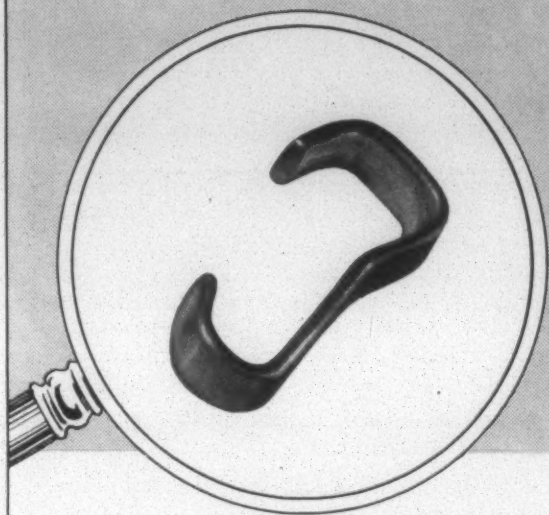
We shall depend upon textile technologists to evaluate the performance of all these finishes and the many special textile weaves used by the Army and Navy in order to tell us which kinds of merchandise and what price lines may best use these war-born or developed products.

My basic theme has been the need for critical appraisal of products prior to their being put on the market and with particular emphasis on end-use. The problem is not an easy one. I suspect it will involve the very critical study on your part of your own laboratory test methods and of the interpretations which may be drawn from these methods and results. I believe, as do most retailers, that customers are entitled to know more about the things they buy and that the information must be accurate and based upon adequate sampling, testing and interpreting. In this study, associations such as the American Association of Textile Technologists, the American Society for Testing Materials, and the American Association of Textile Chemists and Colorists have a very real responsibility. The perfection of test methods and the translation of the results in terms of consumer needs is in your hands, not in the hands of the individual textile manufacturer, processor, garment manufacturer, or retailer. The information collected in your laboratories must be passed onto the users of the material through all economic levels. I suspect that many of you have watched with great interest the use-testing techniques so widely used by the Quartermaster Corps during the war. Granted that actual wear tests are costly and time consuming, it seems to me that when the record of the achievements of the Research and Development Branch of the Office of the Quartermaster General are finally compiled and disseminated to the textile industry, it is very probable that all of us utilizing the services of technical staffs will find a way to apply this technique to some extent in the appraisal of many types of goods and in rating the use-performance of various price lines in the same class of goods.

When performance data, whether they be laboratory test appraisals or use-test results, have finally been assembled, the information can be of most use to retailers and to the ultimate consumer in the form of informative labels. I urge that the technical societies do their level best to encourage the use of informative labels by the companies by whom they are employed, or by the laboratories they represent. The data should be based on standard methods of appraisal or by tests readily identifiable by the user of the product. It may be argued that tags and labels do not add greatly to the display value of merchandise and that in the past store buyers have removed informative labels from the goods before putting them on display. In this respect retailers must put their own houses in order. It is a bad habit and offers a serious bottleneck in the channeling of helpful information from the producer to the ultimate consumer. I anticipate that the confusion that will result when our post-war textile industry really gets moving will make buyers and salespeople require every possible bit of information afforded by tags and labels. In defense of my own business, I might offer the observation that retailers might be more willing to keep the labels on if they were designed

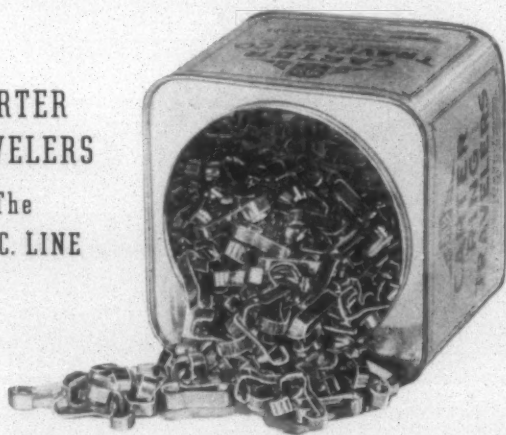


# LITTLE THINGS THAT COUNT BIG—



## CARTER TRAVELERS

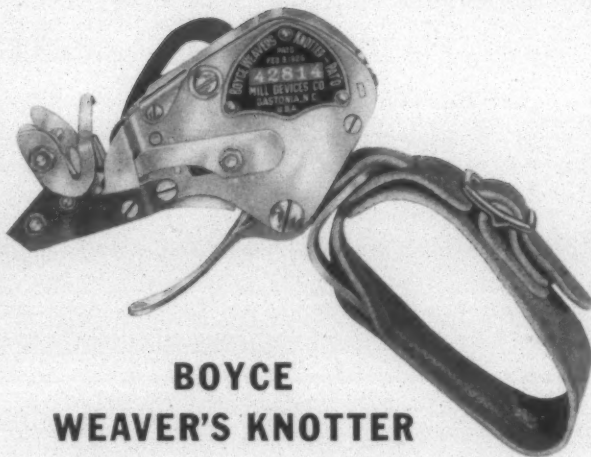
The  
A. B. C. LINE



Efficient, profitable production requires close attention to a lot of *little* things.

This insistence on top performance in every production phase is selling more and more CARTER TRAVELERS.

Absolute uniformity of weight, temper and shape is Carter's guarantee of a traveler job well done.



## BOYCE WEAVER'S KNOTTER

... ties a perfect weaver's knot in the 'wink' of an eye—saves labor and time where it counts.

... is a precision-built instrument—scientifically designed to do a faster, better job than human hands.

... is built for long life and continuous operation—and backed by complete facilities of our Maintenance and Repair Department.

CARTER TRAVELER CO.

MILL DEVICES CO.

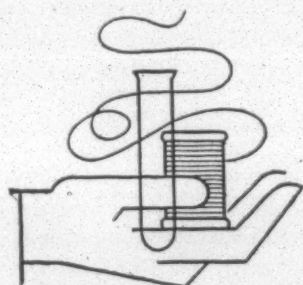
DIVISION OF

**A. B. CARTER, Inc.** GASTONIA  
NORTH CAROLINA



better in the first place. Many textile labels appear to our buyers to be not fully informative and intended to serve principally as a medium for the advertising of the manufacturer's name rather than a consumer aid.

In urging the active promotion of informative labels based on scientifically correct test methods a word of caution must be given. Because of the inadequacy of some of your test procedures to translate the end-use value of a product in terms of the laboratory test results, there has been a tendency in the past to put too broad an interpretation on some of the test results. This amounts to the misapplication of a test method and statements on labels are therefore under suspicion. If laboratory results are to be of dependable value to the users of the product, the data must be technically accurate, competently interpreted and fully presented to the user. If the art and science of textile technologists are called upon by industry to evaluate its products from the end-use view point, you will find, I am sure, that your laboratories will be working primarily in the interest of the consumer of your products even more than for the producer who employs your services.



## The Quartermaster Fights the Weather

By WILLIAM M. LEE

Office of the Quartermaster General, U. S. Army

**P**ROBLEMS of weather and weathering entered into the planning of most of the new items which the Quartermaster supplied during the war, and the reviewing of most of the old ones. This discussion, however, will be confined to two items—tentage and water-resistant clothing.

Weather, in the usual sense, results from the interplay of varying conditions of temperature, humidity, light, wind, rain, snow and ice. But in planning the design of an item for long-time outdoor use, we should think of certain concomitant effects as well—alkaline dusts, salt spray, blown sand, and even mildew. We must consider first how well an item will serve its functions under particular climatic effects, and, second, how this performance will be affected by long-time exposure to these climatic conditions.

Immediately prior to the war, the decision was made that Army tentage should be flame resistant. On the basis of negative evidence, this appears to have been a wise decision. We have not received any reports of large-scale damage to tents by fire, and what is much more important, no reports of deaths or injuries resulting from burning tents.

In the decision to adopt flameproofing, we faced the necessity of accepting a considerable increase in weight, of the general order of 50 per cent, and a decrease in cold flexibility. But by the use of a resinous finish we also had a means of providing a dark olive drab shade by pigmentation. The program could not have been accomplished with any of the sun-fast dyes nor by mineral dyeing. We gained an advantage, in some cases dubious, of improved rainproofness. Mildewproofing agents were also incorporated into the finish so that it served quite successfully one additional function.

Much research must be carried out if we are to know exactly what will be of greatest use to the ultimate consumer in the form of test data, merchandise standards, and informative labels. Perhaps those of us in retailing can be of real help to the laboratory technologists working for the producers of goods in giving them a more accurate index of consumer needs and wants. I do not have time here to go into an explanation of the wants of consumers as contrasted with the wants of consumer leaders who are actuated with the long range aspects of the problem. The impracticality of the present-day status of some of our labeling regulations is emphasized by the fiber content labeling regulations which give no indication whatever as to the serviceability or suitable end-use of a fabric.

In conclusion, let me emphasize the fact that the retail distributor and the laboratory technologist are dependent each upon the other. Only by our combined efforts can retailers and their customers obtain information and standards of quality to supply the ultimate consumer with the best product she can buy for the purpose intended and at the price she can afford to pay.

The evaluation of fire, water, weather and mildew resistant duck has been a difficult and rather unsatisfactory problem. Much of the work done has, however, had direct and valuable application to the original problem. It has led us to one unavoidable conclusion: we cannot predict with any degree of exactitude the general outdoor performance of flameproofed tentage from any series of laboratory tests which are practicable to run repeatedly.

Perhaps there is an answer to that. Perhaps our present apparent confusion lies in the fact that the formulations for finishing tentage are still too far from ideal; that, for instance, we have not provided a large enough margin of safety for protection against sunlight nor enough margin of safety in resistance to mildew. When our technical knowledge in these matters has advanced further, it may be that we shall create finishes for cotton which will be outstandingly good against all of the direct and indirect attacks of weather. When this has been accomplished, such an outstanding finish should rate high whatever the location of exposure, and, in all probability, laboratory test methods will indicate this with perfect clarity.

The problem of improving the performance of tentage against rain was never at any time as critical as the protection of the individual soldier. The Quartermaster Corps faced the problem of maintaining water repellency of clothing fabrics as well as possible under adverse conditions in forward areas, and of restoring it when necessary by relatively simple field treatments.

Tests for acceptance of water repellent fabrics follow this pattern. First: a spray rating which serves as a screening test; unless the initial spray rating is 90, no further tests are



**imparts**

*Full-Bodied*

*Softness...*

**to ALL RAYONS  
SYNTHETICS & COTTONS**



**PARAMINE**

REG. U.S. PAT. OFF.

*The Finish Supreme*

**M**ILL MEN have found out about PARAMINE. . . . They know that to specify PARAMINE is to assure a highly desirable, wool-like texture for spun rayons, and an extra-mellow softness for all rayons, synthetics and cottons . . . and mill executives are pleased to find that PARAMINE gives this added sales value without increasing and often lowering finishing costs!

*Demonstration or further information furnished at your request. . . .*

**ARKANSAS CO., INC.**

*Manufacturers of Industrial Chemicals for over 40 Years*

**Newark, New Jersey**



run. Second: 120 minutes of wet abrasion. For a number of finishes tested, this procedure reduces the efficiency of the finish about as much as it is reduced during an average half life of a garment, including four to six field launderings. Third: a series of four tests: dynamic equilibrium, spray rating, Suter height, and air permeability. This procedure of basing acceptance on a performance level after exposure to degradative influences, seems to be gaining in popularity. The acceptance testing for water-repellent fabrics is a pretty complicated procedure. It would be far more complicated if we tried to carry out a complete evaluation on each sample. The Quartermaster Corps has, therefore, adopted the policy of carrying out extended evaluation tests on any treatment presented for consideration, and on the basis of these evaluation tests, setting up an approved list can then be carried out by means of simplified laboratory tests.

The confirmation of laboratory tests by wear tests has been carried out principally by the Quartermaster Board at Camp Lee, where a rain course has been constructed as an adjunct to the combat course. On the rain course, the soldier performs series of maneuvers—crawling over rocks and through gravel, breaking through stiff undergrowth, or simply walking on a circular track; all this in a continuous rainstorm which may be adjusted anywhere from a heavy down-pour to a nasty drizzle. This rain comes from a series of 50-foot

stand-pipes with carefully designed spray heads which throw the water up, not down. By the time it reaches the ground the drops resemble rain very closely, in pattern, in velocity, and in drop size distribution.

Another type of clothing testing has been carried out over the past several years at the Climatic Research Laboratory of the Quartermaster Corps at Lawrence, Mass. An experimental garment is worn by a number of test subjects through a planned course of exercises. The aim, however, is different, for measurements of results are carried out—usually—on the test subject only. How much did he sweat, what has happened to his body temperature, how tired is he?

The future research aims of the Quartermaster Corps are being developed in detail at the present time. The research program is to be on a much larger scale than that of the pre-war period. The investigations themselves will be considerably more fundamental than those which could be justified under wartime urgencies. The problem, at least in part, on which we will be working is to provide all of the clothing, the equipment, and the supplies needed to keep the individual soldier well and contented and efficient at his assigned job in any area of the world, under any weather conditions and even under artificial conditions which his work may make necessary—such as high altitude. We must keep him as mobile and self sufficient as possible—not tied too closely to a supply base.

## Recent Developments and Current Outlook in the American Wool Industry

**R**ANKING as the third largest wool-growing nation in the world, America's wool textile production today is actually ahead of that of Britain, traditionally the world's largest peacetime producer. Textile output in this country doubled during World War II, as against a 50 per cent increase for Great Britain. For the first time in its history the United States wool industry could be classed as a billion dollar enterprise, having expanded approximately 25 per cent since World War I.

The United States was among those nations which encouraged the production and importation of a substantial reserve supply at the beginning of the second world war when stockpiling of various materials was undertaken as national policy; the country is now confronted with large surplus stocks which may, or may not, be used in manufacturing apparel for war veterans.

Total world production of wool in 1943 was more than four billion pounds, a reduction of 90 million pounds from the 1942 level but 230 million pounds more than a typical peacetime year such as 1937. Australia, long the world's largest producer of apparel wool fibers, contributed more



than a quarter of the 1943 total world output. Production details of the leading wool countries before and during the war are shown for selected years in the following table:

WORLD PRODUCTION OF WOOL  
(In millions of pounds, grease basis)

	1937	1942	1943
Australia .....	1,023	1,120	1,110
Argentina .....	366	518	510
United States .....	424	459	448
New Zealand .....	297	340	310
British South Africa .....	233	260	250
Russia .....	260	270	230
Uruguay .....	116	124	136
United Kingdom .....	123	104	103
China .....	80	90	90
Total world production, including all countries .....	3,800	4,120	4,030

Source: Department of Agriculture.

Few industries are as old as that involving the raising and manufacture of wool. In fact when man first took the sheepskin he was wearing and wove the wool into a separate garment, it was so far back in history that no one has recorded it. When the Romans invaded Britain they estab-



# "The Secret is in the Lap"



THE CONVENTIONAL TAPE  
Has Double Thickness Laps

SIDEBOTHAM'S PATENTED LAP  
Permits Same Thickness Throughout

*Sidebotham's*

PATENTED SPINNING TAPE

BANISHES THOSE SPINDLE "BUMPS"

**RIGHT** *IN PRINCIPLE*  
*IN SERVICE*

**SIDEBOTHAM'S TAPE IS ALWAYS IN CONTACT with the Whorl...**

## *It Insures*

- ✓ Longer life, as proved by independent mill tests
- ✓ More even spindle speed
- ✓ More even yarn twist
- ✓ Less wear on bolster
- ✓ Less power consumption

More Than <sup>250</sup>~~200~~ Mills Are Enthusiastic Users of Sidebotham's Spinning Tape

### TRY A ROLL IN YOUR OWN MILL

Simply select a tape of correct length from one of your frames; cut it at any point except at Lap; roll it up and mail it to us with your trial order. Then

**COMPARE THE ACTUAL PERFORMANCE**

### MADE IN TWO WEIGHTS and ALL WIDTHS

No. 2658—Regular 40-42 yards per lb.  
No. 3750—Light 54-56 yards per lb.  
(based on  $\frac{5}{8}$ " widths)

Comes in rolls of continuous and uniform lengths. All laps 3".

**WOVEN TO YOUR LENGTH SPECIFICATION**

*Sold Exclusively By*

# TEXTILE

## *Specialty Company*

P. O. BOX 1297

GREENSBORO, N. C.

### *Representatives*

GEORGIA AND ALABAMA

John C. Turner, P. O. Box 916, Atlanta, Ga.

NEW ENGLAND AND CANADA

Matthews Equipment Company, Providence, R. I.

PHILADELPHIA DISTRICT

C. B. Morton, 452 Green Lane, Roxborough, Philadelphia, Pa.



lished the first wool factory in that country to supply their occupying army with clothing. Sheep were introduced in the United States in 1609, and the first American woolen mill was erected at Rowley, Mass., some 35 years later. Today there are 55 million sheep in the country requiring the services of 500,000 employees.

While the development of the United States wool industry has been of great economic importance to the nation as a whole, it is of special consequence to the western range states where 75 per cent of the industry is located. Wool is produced in all of the states, but Texas is well in the lead with a production which has averaged 75 million pounds annually in recent years.

Fundamentally the wool industry consists of four main groups—the wool growers, wool dealers, semi-manufacturers, and the weaving and knitting mills. Semi-manufacturers may specialize in wool scouring, in combing (top making), or in spinning (yarn making) or may combine two or more of these processes, whereas integrated wool textile mills perform all of these operations in addition to the final stage of fabric weaving and knitting.



Raw wool is classified roughly according to its fineness and its length or staple. The longer fibers within any given grade are used in worsted, the shorter lengths in woolen manufacture, and both may be used in the knitting branch. These three phases of the wool textile industry consume the improved or "apparel" wools, whereas the coarse and more wiry wools are used in the carpet industry. The usual system of grading wool is to indicate the degree of fineness by the use of numbers. About 98 per cent of the wool produced in the United States ranges from 46s (low-quarter-blood) to 70s quality.

In comparing quantities of wool, statistics are often difficult to correlate because they can be expressed (1) on a grease basis—exactly as shorn from the sheep; (2) on a scoured basis—with the grease and impurities removed; and (3) as actual weight—combining wools in the grease, washed and scoured condition. The figures given on one basis cannot be converted to another as the clean scoured yield of wool varies considerably from region to region, and may even vary in the same district from year to year. The weight of wool left after scouring will sometimes range from nearly 80 per cent for some New Zealand coarse wools to as low as 30 per cent for a part of the American fine wools from dust-ridden areas. American wools shrink an average of approximately 60 per cent.

### The Situation During World War I

Since the United States has never produced enough wool to satisfy its normal requirements, stockpiling of raw wool was a characteristic of both world wars. From the commencement of hostilities in Europe to American participation, the history of the industry in the first war was divided into two sharply defined periods. The first, which lasted until 1916, was subject to comparatively normal conditions; the second was marked by sharply advancing prices.

Plentiful supplies of foreign wool acted as a check on prices during the first period. Imports of apparel wool, less

re-exports, amounted to 61 million pounds in 1913; in the next three years they totaled 166, 307 and 364 million pounds, respectively. By the end of 1916 the industry in the United States was operating practically at capacity.

Factors that combined to raise the 1916 wool prices into the inflationary wool market of mid-1917, halted only by government intervention, were primarily these: (a) the increasing purchasing power of the civilian consumer; (b) the Army entry into the market in 1916 with requirements for military cloth; (c) increasingly precarious shipping conditions; (d) the purchase of the entire Australasian wool clip by the British Government; and (e) lack of rationing and price controls.

Rising prices in the American market were finally checked by the substantial purchases of our War Department which had virtual control of the entire industry at the end of the war. It was buying all imports and was the only agency allowed to purchase in the Uruguayan, Argentine and South African markets. Altogether, the War Department acquired about 674 million pounds of wool, but by Dec. 31, 1919, the quantity on hand had been reduced to approximately 98 million pounds. This was accomplished by offering the stocks at a series of auctions with the British issue prices as a minima. The policy of equalizing British and American prices temporarily was credited with preventing a market crash.

On May 8, 1920, there was almost a complete cessation of buying. Only 42 per cent of the government-offered wool was sold in the government auctions and prices inevitably declined. The crash started the beginning of tariff legislation against imported wool. Wool had been free of duty under the Tariff Act of 1913. Under the Emergency Tariff (effective May 28, 1921, to Sept. 21, 1922) a duty of 45 cents per scoured pound was levied on apparel wools. Other important tariff acts which followed included that of 1922, which placed a basic duty of 31 cents per pound of clean content on apparel wools similar to those produced in this country; and the Tariff Act of 1930, with a duty of 34 cents, clean content, on the major types of imported wools. The price stimulus of these duties was an important factor in increasing United States production.

### Wool Conditions in 1920-1940

A paradoxical characteristic of the past 20 years was the wide variation in prices to producers, accompanied by a steady increase in numbers of stock sheep and in wool production. Prices of both wool and lambs showed an unusual relationship during this period; when business conditions were good, wool commanded a relatively higher price than lambs, and vice versa. In 1928 there were 40.7 million head of stock sheep in the country, and the farm and ranch price was 36.2 cents a pound. In 1932 there were 47.8 million head of sheep and the price was 8.6 cents per pound.

### Current Consumption and Competition

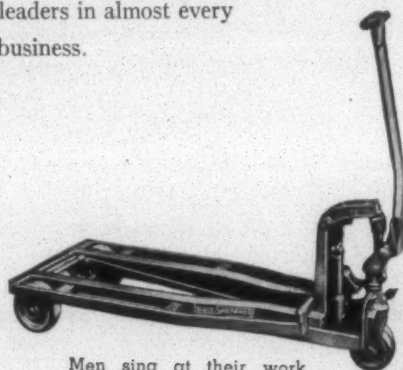
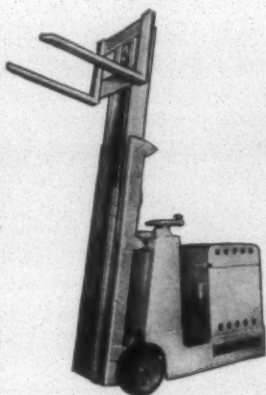
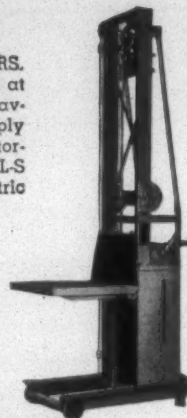
A favorable factor in the liquidation of surplus wool stocks in this period of readjustment is the fulfillment of a large civilian demand all over the world. In the United States, which had 11 million men and women in the armed forces—aside from the civilians who must replenish their war-restricted wardrobes—it is estimated that annual consumption of apparel wool in the United States will total 350 million scoured pounds for this period immediately



# Win Over Costs With L-S Wheeled Vehicles!

From North to South and from East to West. From airplanes to autos, from bakers to bottlers, from canners to chemicals, from dairies to distillers, and from electrical equipment to express companies . . . from food to farm machinery, from glass to groceries, from leather to lumber, from marble to metals, and from machine tools to marine engines . . . from oil to oxygen, paper to public utilities, stoneware to stoves, textiles to tin,—and from warehouse to the four corners of the globe. In peace and war for over thirty years Lewis-Shepard products have been and are today profitably employed by industrial leaders in almost every conceivable kind of business.

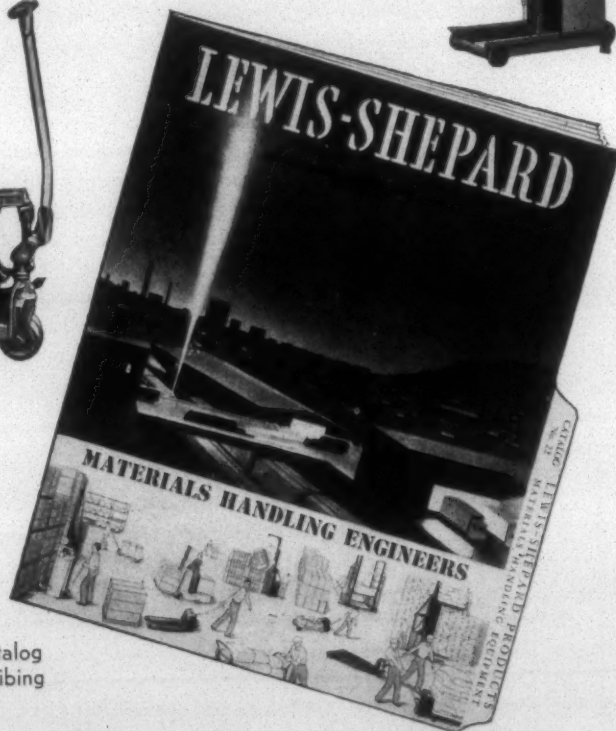
**STACKERS and LIFTERS.**  
Now you, too, can thrill at new production line savings! . . . and multiply your floor space by storing ceiling high with L-S hand power and electric power Stackers.



Men sing at their work when you give them JACK-LIFTS and spare their sacroiliacs . . . The JACK-LIFT is the only mechanical lift truck with ALL the good features.

Palletize! Modernize! L-S Power Fork Trucks head the parade to new savings in production, handling, moving and storage . . . Electric Power, Gas Power, or Gas & Electric Power!

Send for 76-page, 3-color Catalog profusely illustrated and describing the complete line.



## LEWIS-SHEPARD PRODUCTS, INC.

WATERTOWN 72, MASSACHUSETTS

*Lewis-Shepard Plants at Watertown, Mass. and Craufordsville, Ind.*

Representatives in All Principal Cities

Consult Your Telephone Directory

SINGLELIFTS	HYDRAULIC HANDLIFT TRUCKS	JACKLIFTS	SKIDS	PALLETS
PALLET TRUCKS	PALLET STACKERS	PRODUCTION LIFTERS	CRANES	
RACKS	FLOOR TRUCKS	ELECTRIC, GAS-ELECTRIC AND GASOLINE POWER TRUCKS		



following the end of hostilities. In comparison with total world stocks, however, the domestic market is expected to absorb only about 15 per cent of the total world accumulation, plus production in the three-year post-war period.

Meanwhile, domestic textile mills have been working successfully to overcome the popular prejudice against domestic goods in the higher-price apparel lines. American retail merchants have no objections to domestic woolen goods as such. Their main points of dissatisfaction are the wide price disparity between American and British textiles, and the fact that the American textiles have lacked the superior "decorating" of the British. Enormous strides have been taken in the last five years to overcome this last objection, and current developments point to increasing competition with the British in the present textile market.

The competition of synthetic fibers to be blended with wool, and even the prospects of new synthetic fibers to compete directly with wool, are a source of concern to wool producers everywhere. They have the asset of a deeply rooted public conviction regarding the natural superiority of wool—"all wool and a yard wide." The buying public does not have to be sold on the specific qualities of wool. Yet rayon fiber is being produced and consumed in increasing quantities.

The chance of making a wool-like fiber that will be a complete and satisfactory substitute for wool cannot be evaluated at present. In addition to the familiar rayon, nylon has been spun into a fleecy fabric and other synthetic fibers like it are the subject of laboratory experiments which have not yet been released for commercial production. Indicative of the success of man in supplementing natural wool, laboratories have already produced vinyon, velon, soybean fiber, seaweed yarn, aralac, shredded redwood bark and glass fiber. All are being used for manufacture of materials and their uses are being steadily extended.

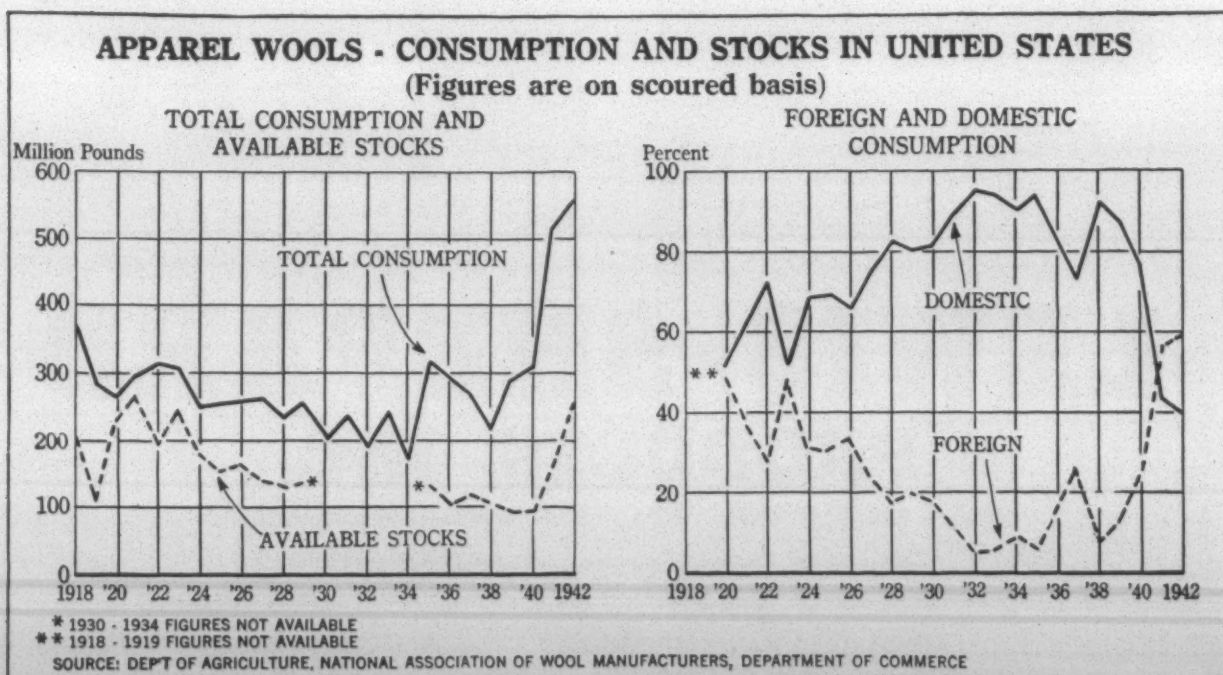
During the war years, Axis markets lost a supply of

650 million pounds of wool, scoured weight, and both Japan and Germany have been busy in the field of substitute fibers to attempt to fill this gap. The importance of synthetic fibers is paramount in all countries dominated by nationalistic policies which tend to utilize home-produced rayon rather than imported wool. The higher the price of wool, warns the United States Tariff Commission, the more vulnerable it is to the competition of other fibers either in blends or as total substitutes.

Whether new markets being developed by the wool industry, in conjunction with its technical progress, are sufficient to absorb a vastly increased capacity is a question that cannot be answered conclusively at the present time. In spite of unprecedented wartime requirements, there were 2.18 linear yards of woolen goods per capita available for civilian consumption in 1943, as against 2.60 yards in 1937. The production of an industry that has mushroomed into such formidable proportions cannot quickly be curtailed without severe dislocations.

In contrast to this picture leaders of the wool industry stress several favorable factors, the most immediate being the billion dollar bonus that men's clothing manufacturers are to get from returning ex-servicemen. Civilians, too, will buy more woolen products when more retail stocks are available; the unfilled orders for both men's and women's wear were at the highest level on record in 1943. Wool also will be used for new types of clothing and decorations, when such industries as aviation become an integral part of civilian life.

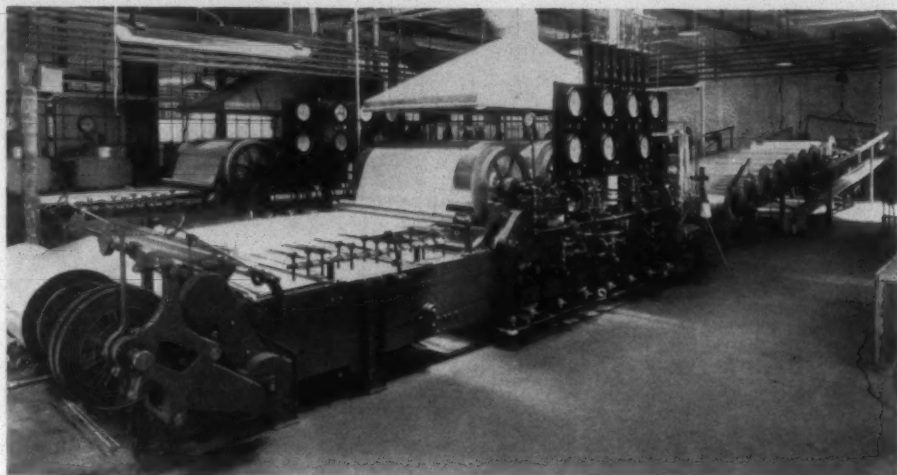
But once the war-caused demand for wool is satisfied, it is impossible to foretell what direction this important old industry may take. With the industry's manufacturing and marketing skill clearly demonstrated in both peace and war, the future of wool will depend largely on the character of tariff regulations and governmental controls which are established in peacetime.





# EFFICIENT MILLS

## Depend On— JOHNSON WARP SIZERS



## FOR HIGHER HOURLY PRODUCTION OF SUPERIOR WARPS— WITHOUT BREAKDOWNS

When you want a slasher that will assure higher hourly production of superior synthetic yarn warps, without mechanical breakdowns, you, too, will select the Johnson sizer.

With it you will get fewer broken ends in slashing, and fewer stoppages to leave marks on the warps and slow down production.

With better warps, loom production of better fabrics will be increased.

N. B. *Facts and Figures*, furnished us by our customers, which, due to space limitations, cannot be given here, will be gladly shown you on request.

**Charles B. Johnson**  
**MACHINE WORKS**

PATERSON

NEW JERSEY





# The Place of Rayon in Tires

By W. D. R. STRAUGHN  
E. I. du Pont de Nemours & Co., Inc.

RAYON in tires is actually a recent development. It was only in 1934 that Du Pont introduced its high-tenacity viscose type tire yarn called Cordura and it was not until around 1936 that production of Cordura got under way even on a small scale. Practically the entire production that year went into tires made by two rubber companies. In 1937 another rubber company started the use of rayon in a small way and by 1939 the number had only grown to four. By this time the rumblings of war in Europe were loud and war finally did break out. Actually, it was not until 1943 that rayon for tires was adopted generally by the rubber companies as a result of the government tire program.

Some will say the war was largely responsible for putting rayon into tires. There is no doubt but what the war accelerated and aided the general use of rayon in tires but we believe, for many reasons, that high-tenacity rayon was bound to find use as a cord in tires. With the exception of the year 1940, when a modest gain of about nine per cent occurred, shipments of tire rayon showed substantial gains particularly when you consider that during the early years it was used mainly in the heavier types of bus and truck tires. Only a few premium rayon passenger tires were made. So you see, rayon had to be doing an outstanding job to make such gains.

High-tenacity rayon is made on equipment quite different than that used for textile rayon. The basic principles are the same, but you just cannot turn the valve part way for fine denier textile yarn and open it up wide for heavy denier high-tenacity tire yarn. It's not that simple. For example, during 1943 as a result of the government request for more rayon for tires, Du Pont converted one of its bucket spinning type plants from textile rayon to tire yarn. The conversion took approximately a year. Much heavier and in certain respects different equipment had to be installed throughout. This plant could be converted back in short time but it would take a period of months. Some people, we are afraid, think that these rayon plants making tire yarn could be changed back to textile yarn overnight.

An important thing to remember is that the tire industry in purchasing high-tenacity rayon is purchasing *strength* along with other properties that the yarn must have. Depth and uniformity of dyeing, drape, fabric hand, and other characteristics you men are constantly thinking of are of no consequence. Purification and processing of the yarn after spinning is quite different. In other words, compared to textile yarn the manufacturing process and properties of the product are quite different. With this information in mind you can readily see that tire rayon has been developed as a special venture by rayon producers.

According to the best figures I have, the government during the war provided approximately \$23,220,000 to three rayon producers to increase tire rayon production. Now this money was not a gift, but even in the face of the large expenditures the price of rayon tire yarns re-

mained constant throughout the war period. Since the close of the war one producer has lowered the price of one of his tire yarns and on all types of his rayon tire fabric and independent companies who twist and weave tire rayon are now charging between six and eight cents per pound less for conversion than during the war. On the other hand, some cotton tire cord fabrics, we understand, have been permitted an increase in ceiling price. The net result has been that rubber manufacturers tell us they can make a tire cheaper today with rayon cord than with cotton cord.

Before we leave the general subject of rayon manufacture let's see just what effect the increase in tire yarn production has had on the amount of textile rayon available in the trade. In the following tabulation I have used the production figures provided by the Textile Economics Bureau, Inc., for the amounts of viscose (plus cupra) and acetate continuous filament rayon yarns available for the years indicated. These amounts are given in columns (a) and (d). From (a) I have subtracted the tire yarn shipments (b). The difference is represented by column (c).

Year	(a) Total Filament Rayon VCN*	(b) Tire Rayon V	(c) Filament Rayon Available for Textile Use VCN*	(d) Acetate Rayon Filament Available for Textile Use
1938	182,000,000	3,784,000	178,216,000	76,000,000
1939	241,000,000	8,800,000	222,200,000	98,000,000
1940	257,000,000	9,569,000	247,431,000	133,000,000
1941	287,000,000	18,251,000	268,749,000	164,000,000
1942	310,000,000	28,443,000	281,557,000	169,000,000
1943	338,000,000	55,800,000	282,200,000	163,000,000
1944	383,000,000	118,500,000	264,500,000	172,000,000

\*VCN means viscose, cuprammonium and nitrocellulose, respectively.

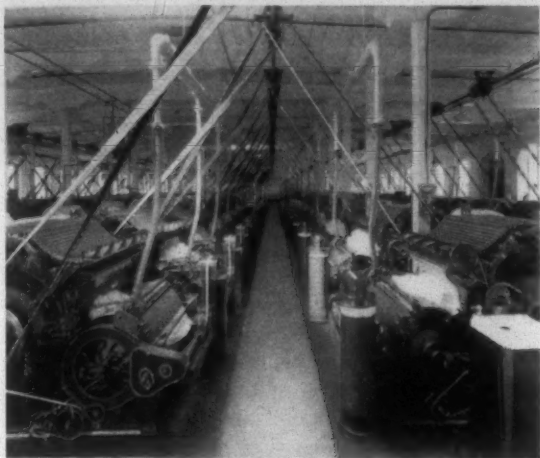
From the above information it can be seen that the expansion of tire yarn up to 1944 had not affected the amount of viscose type rayon (including cupra) available for textile uses since there was an increase yearly. During 1944 there was only a decrease of 17,700,000 pounds from 1943 because of the expansion of tire yarn and this poundage was partially offset by the 9,000,000-pound expansion of acetate filament. Certainly with the increases in both viscose and acetate yarns we have been reading about, before too long the production of rayon yarns in the United States for textile use will be higher than at any period in its history even if tire rayon is maintained at the current or slightly higher level.

So far as twisting and weaving are concerned there are ample facilities to take care of the present tire yarn production. A textile technologist used to handling apparel fabrics would probably get very little thrill out of the textile operations connected with the use of rayon in tires. High-tenacity yarns with or without twist are delivered on beams to textile mills. These beams generally contain between 100 and 200 ends. At present, three producers sell yarn only. One other producer sells yarn and fabric and the fifth producer, we are told, will eventually be selling all fabric;



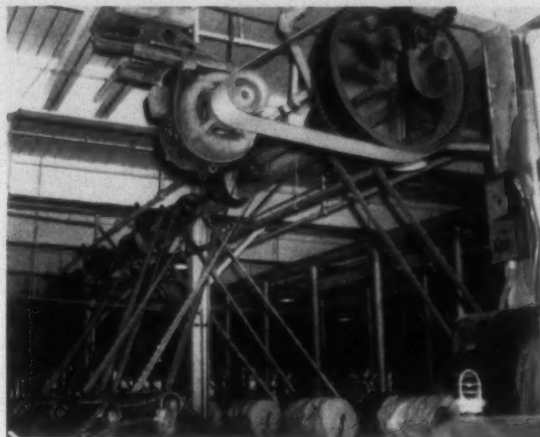
## IN CARD ROOM ... SPINNING ROOM ... ON LOOMS

### Tannate Belted Drives are Efficient Drives



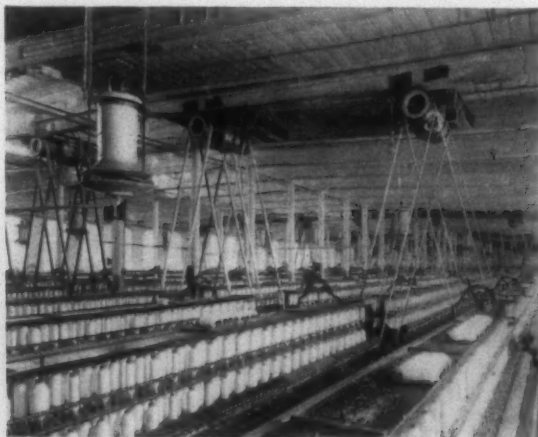
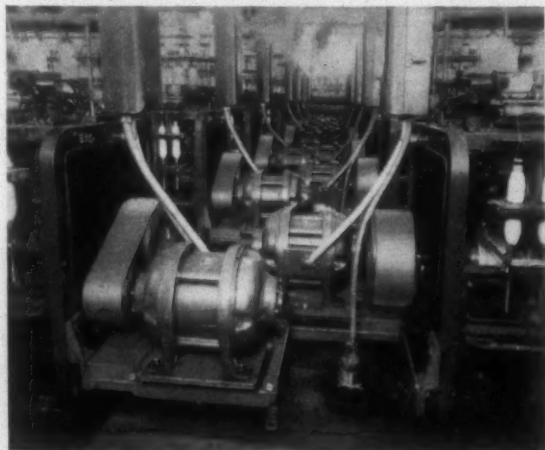
Use TANNATE Leather Belting for maximum output on cards, spinning frames, looms and in fact any type of textile machine whether driven individually or in a group. TANNATE-belted drives maintain consistently high production.

TANNATE'S powerful grip assures maximum power transmission at top speeds; you get uniform work with less spoilage. Its exceptional strength and stamina give a long service life with practically no maintenance.



Carefully compared belt performances, reported by mills using TANNATE belting show that it gives them continuous output at lower unit costs; extremely long service life (often years of three shift daily operation) with few interruptions and with minimum maintenance expense.

The TANNATE-ROCKWOOD Pivoted Motor Base Drive is recommended for many short center installations. We shall be glad to supply more information about this drive . . . or to advise and help you on any drive problem.



**J. E. RHOADS & SONS** 35 N. SIXTH ST., PHILA. 6, PA.  
Established 1702 NEW YORK • CHICAGO • ATLANTA

**RHOADS**

*Tannate*  
WATERSHED  
LEATHER BELTING

*Tannate-Rockwood*  
SHORT CENTER DRIVE



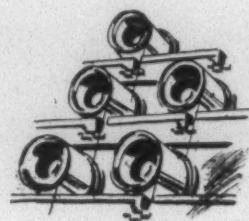
perhaps this producer has already reached that point. The beams of yarn are mounted on conventional down twisters and the individual ends twisted to specifications provided by the rubber company. Most all companies, up to the present, have used a cord of two-ply construction with 1,100 or 2,200 denier yarn, therefore, two ends from the first twisting operation are combined to make the final cord. The twist used is very important since there must be a delicate balance between the strength and elongation characteristics of the cord. The textile engineer connected with tire design has constructed his cord to give maximum strength and low elongation, but with sufficient elongation to provide suitable fatigue (ability to withstand constant flexing). These are three important factors in a cord which go to make a tire having a high degree of safety, smooth riding and long life. If too much twist is used in the cord and ultimate strength of the carcass is impaired; also if too much elongation is left in the cord the tire will grow, causing the tread to crack if, on the other hand, too little elongation is left in the cord, fatigue will be poor and the tire will be more susceptible to bruise failures. With high-tenacity rayon the textile engineer has been able to balance these properties satisfactorily. Today, as a result of improved rubber compounding, improved cords, and improved tire design, we read comments by executives of the large rubber companies mentioning tires which will last the life of the car.

Three types of fabric known as body fabric, top ply and breaker fabric are made from rayon cords with the strength in the warp direction. A few picks per inch (generally two to four of cotton filling yarn, usually 30s) are used for ease of handling and to assist in keeping the warp ends parallel during the dipping and calendering operations. The body ply is the most densely constructed of the three fabrics and is really the backbone of the strength given the tire by the cords. This fabric generally contains anywhere from 30 to 35 warp ends of 1,100/2 rayon cord per inch. The top ply and the breaker are usually more loosely constructed and are adjacent to the tread portion of the tire. A top ply fabric may contain 18 to 26 warp ends of 1,100 cords per inch and the breaker 12 to 18 ends. The breaker adds strength to the crown of the tire and creates a joint between the carcass proper and the tread. The two top plies, used only in truck tires, also permits a good adhesive bond between the tread and other parts of the tire.

After the rayon cord fabric is given an adhesive treatment and dried to a low moisture content it is immediately run through calendering rolls and impregnated with rubber. After this step the fabric is cut on the bias into sizes suitable for the tires being manufactured. We understand a bias cut

adds stability and balance to the tire. Usually adjacent plies have the cords running in opposite directions.

One manufacturing process does not utilize fabric. The adhesive treated cords are run directly from a reel to the calender.

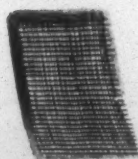


The question of proper adhesion between rayon cords and rubber in the tire is a very important one. Rayon cords by nature are smoother and have different adhesion characteristics than cotton cords. Proper adhesives to obtain the required bond of rayon with rubber represented one of the earliest and most important problems in connection with successful use of rayon in tires. Du Pont developed and made available the Resorcinol-Formaldehyde-Latex treatment which has proven very successful. Since that time, other adhesives just as suitable for good bonding of rayon to rubber have been developed and are being used with equal success by the tire industry.

Many of you perhaps are thinking about the future of rayon in tires. I am convinced that the tire industry will consume for the next two years all the high-tenacity rayon now being produced and it is my personal opinion the rubber industry will consume the present production for a number of years to come. Certainly they would consume much larger quantities during the next two years if it were available. Many executives of the rubber industry have provided me with the yarn requirements to cover their plans for 1946 and 1947. The total of the requirements make the largest pre-war tire cord figures look modest indeed.

Because of the fine performance of high-tenacity rayon in tires and its limited production, spun rayon cord fabric is being evaluated. These cords, similarly to continuous filament rayon, become stronger as moisture is removed. We are awaiting the outcome of tests with interest.

I am sure that I am speaking for all rayon producers when I say that we realize that if rayon is to hold its position in the tire field and meet competition from other synthetic fibers, which may appear in the future, very active research will have to be continued by our chemists and engineers. Some of the new improvements made in tire rayon, which are sure to result from research, can probably be utilized also in the manufacture of textile rayon yarns and vice versa. This will profit the whole industry.



## Glass Fibers in the Textile Picture

By JOHN H. THOMAS, General Sales Manager  
Owens-Corning Fibreglas Corp., Toledo, Ohio

THE term "fibreglas textiles" covers a very wide range of types, each possessing its own distinctive properties. In other words, there is no single fibreglas textile that is designed to meet all of the requirements for all of the great variety of applications in which fibreglas textiles are em-

ployed. Fibreglas textiles are a true engineering material in that each type is manufactured to rigid specifications fixed by its end use.

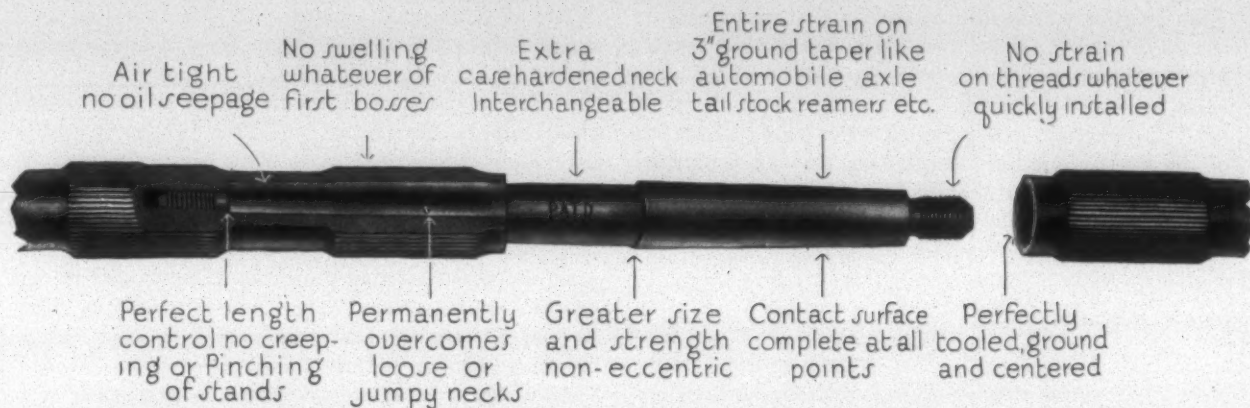
Ability to produce so great a range of types, each with predetermined properties, is largely due to the fact that



## Special Announcement

### NEW FLUTED STEEL ROLLS WITH PATENT TAPER FITTING NECKS

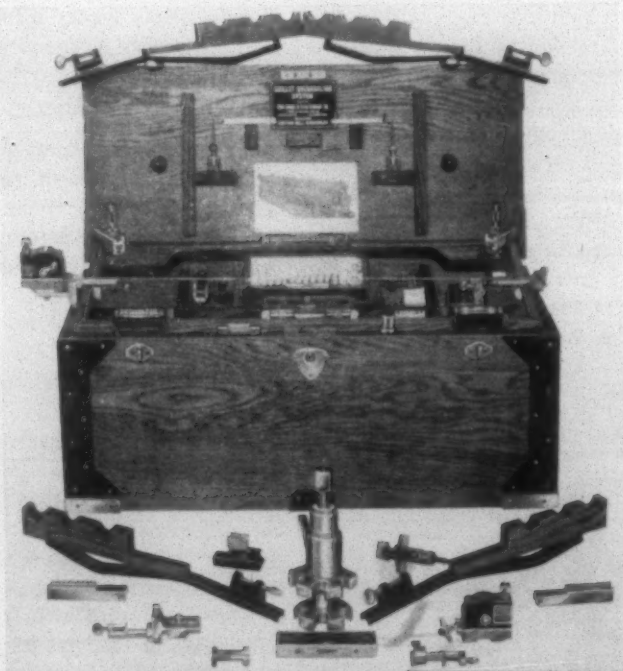
AS GRAPHICALLY ILLUSTRATED BELOW



HARD CHROME PLATED FLUTES OR PLAIN • COMPLETE LINE, JOINED AT EACH OR ALTERNATE SECTIONS

## GUILLET'S SYSTEM of LINING and LEVELING

☆  
Adapted to  
ROVING  
TWISTING  
SPOOLING  
SPINNING  
WINDING  
☆



☆  
These precision  
instruments are  
used in erect-  
ing all new  
Saco-Lowell  
machinery  
☆

Card Room Spindles Drop Forged and Re-topped or Reversed • Flyers Completely Reconditioned and Balanced by Hand  
NEW "BAMACO" FLYER PRESSERS • ALCO CARD SLIVER COMPRESSORS

MANUFACTURERS

## DIXIE SPINDLE & FLYER COMPANY, Inc.

1906 N. BREVARD ST.

ALBERT M. GUILLET, President

CHARLOTTE, N. C.



the glass fibers are subject to a high degree of control from the initial to the final stage of production. The batch, consisting of sand and mineral oxides, is made up in accordance with one of a number of formulas, depending upon the properties desired. Fiber diameters are subject to control by regulating melting temperatures and the viscosity of the glass, and by adjusting the size of the orifices through which the glass flows from the melting furnaces. That fiberglass textiles can be, and are, manufactured so exactly to meet the requirements of a specific end use is a great advantage to designers and engineers in all the many fields in which the textiles are employed. On the other hand, this very advantage precludes the indiscriminate use of the various types of fiberglass textiles. The properties that make a particular fiberglass textile particularly suitable for one end use may be properties that make it unsuitable for an application for which it was not designed.

### Born of Research

Fiberglass is the outgrowth of research initiated in the early 1930s. From that day to this, research has been primarily responsible for the progress that has been made in developing finer, more pliable and stronger fibers, and in adapting them to meet the requirements of steadily expanding uses. The personnel of the Fiberglass Corp., research laboratories and pilot plants constitutes approximately ten per cent of all fiberglass personnel. During the period of the war, the entire resources of these laboratories and pilot plants were devoted to meeting the needs of the armed forces. More than 300 research projects covering potential peacetime uses of fiberglass were shelved for the duration. This dammed-up flood of research has now been released. Today the entire resources of the laboratories and pilot plants are focused upon the development of new processes, products and markets.

All fiberglass textiles, regardless of their type, possess certain common properties. These properties, common to fiberglass—a mineral textile—are the properties that chiefly differentiate fiberglass textiles from organic and synthetic textiles. In all instances, these properties, common to all types of fiberglass textiles, are the basis for the standard

uses of fiberglass textiles and for the newer uses now in various stages of development.

Fiberglass staple fibers average about nine inches in length. Length of the continuous filament fibers is limited only by packaging requirements. The filaments could be drawn to indefinite lengths, running to thousands of miles. Like most materials that are produced in accordance with exact specifications, the fibers require handling that meets certain predetermined requirements. This does not mean that the fibers have to be coddled. They are a sturdy material and can be twisted, plied and woven on standard textile machinery, adapted to handling glass fibers. All fiberglass textiles possess unusual physical and chemical stability. Both fibers and yarns show an elongation up to three per cent at maximum tension. Fabrics have little or no stretch, except that due to the weave. Moisture changes do not cause stretch or shrinkage. Both yarns and fabrics have good electrical insulating properties. They cannot rot and no moth has been found tough enough to eat glass. They are not affected by weak alkalis and by acids, except hydrofluoric and phosphoric acids.

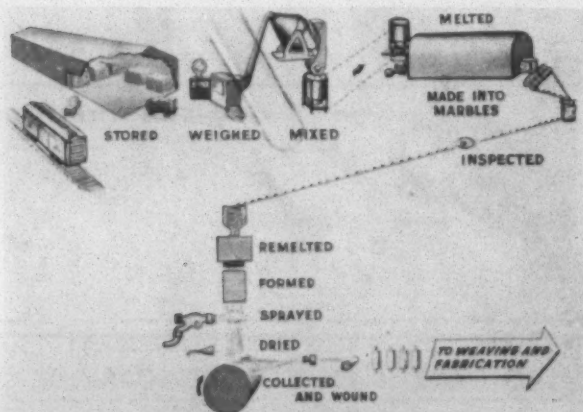
All fiberglass textiles are completely incombustible. Tensile strength of standard fiberglass textile fibers is in the order of 300,000 pounds per square inch. Average fiber diameters range from 22 to 38 one-hundred-thousandths of an inch. Realizable strength, after the fibers have been fabricated into yarns and fabrics, is somewhat less than the strength of the individual fibers, and is influenced by the construction of the yarn and weave of the fabric. The breaking strength of fiberglass yarns and fabrics, however, is considerably higher than that of substantially all other textile materials of comparable thickness and construction.

### Pre-War and War Uses

Fiberglass tapes, braids, cloths and sleeveings, impregnated with a suitable varnish, were being widely employed as electrical insulation in motors, generators, transformers and other electrical units before the war. The same characteristics that caused fiberglass electrical insulation to be so widely used in war applications—a small space factor and resistance to high temperatures and moisture penetration—are proving a major aid to design engineers in their continuing efforts to give electrical equipment greater stamina and to reduce the size and weight of units required to do a given job. For special uses, fiberglass-insulated motors have been made that weigh only a pound per horsepower.

The chemical industry's use of fiberglass fabrics to filter hot, concentrated acid solutions was well established before the war. Fiberglass decorative fabrics were being produced in limited quantities until Pearl Harbor halted production of fiberglass materials for non-essential civilian uses. Incorporation of fiberglass yarn in necktie fabrics to help the fabrics withstand repeated wrinkling was another temporary war casualty.

During the war period it was discovered that there was an urgent need for incombustible, dimensionally stable, rot-proof fabrics in many military and naval applications—as for lagging for shipboard and aircraft piping, parachute flare shades, portable drinking water tanks, aircraft hangar curtains, reinforcement for high-strength plastics. In some instances war needs were met by use or adaption of standard forms of fiberglass textiles; in other instances new forms



The manufacture of fiberglass fibers and the yarns for weaving fiberglass fabrics demand exacting control, rigid inspection and careful laboratory analysis every step of the way. This 'flow' chart portrays the many steps necessary to the production of continuous filament fiberglass yarns. Above the chart and to the right are illustrated a few of these major steps. Fiberglass staple yarns are produced in much the same manner, except that as the thin streams of molten glass flow downward, after remelting, they are struck by jets of high pressure air or steam which yank the glass into fibers varying in length from eight to 15 inches.



1868 — 1946

SEVENTY-EIGHT YEARS OF SERVICE  
And CONSTANT MACHINE IMPROVEMENT

by Specializing in the Manufacture of  
TRAVERSE GRINDING EQUIPMENT  
alone

**B. S. ROY & SON CO.**

WORCESTER, MASS.

GREENVILLE, S. C.

**North Carolina Finishing Company**

**North Carolina Fabrics Corporation**

Standard and Specialty Dyers and  
Finishers of All Types of Cotton  
and Synthetic Fibre Fabrics

**Plant: Salisbury, N. C.**

**New York Agent: W. T. Jordan, 320 Broadway, New York, N. Y.**



were developed which met war requirements and which have laid the basis for new peacetime forms and uses.

Basic engineering data required for an initial evaluation of the potentialities of fiberglass-reinforced plastic laminates was provided as a result of the combined research activities of the U. S. Army Air Forces Material Command at Wright Field, Ohio, the research laboratories of the Fiberglas Corp., and the research laboratories of many resin manufacturers. The performance of this new, high-strength, lightweight structural material in aircraft and other military applications indicates that plastics reinforcements will call for a rapidly growing volume of fiberglass textiles.

Fiberglass fibers, usually in the form of fabrics, are employed to reinforce plastics much as steel rods are employed to reinforce concrete. Both research and fabricating experience have demonstrated that the properties of the finished glass-plastic laminates are largely dependent upon the type and construction of the glass reinforcement used. Plastics reinforcement provides a good example of how fiberglass textiles are tailored to fit them for the specific end use, which may well require certain properties that would be of little or no value in another application.

In addition to the plain weaves of glass cloth that are available, warp unidirectional cloths, having strong warp yarns and light fill yarns, and fill unidirectional cloths, with light warp and strong filling yarns, have been developed especially for plastics reinforcement. To eliminate the necessity of cross-laminating, warp unidirectional cloths can be combined with filling unidirectional cloths on a resin impregnating machine, and the two used as a single ply. Because unidirectional fabrics have had to be cross-laminated to obtain balanced strength properties, they have not been used as extensively as the plain woven fabrics. Yet it is with these unidirectional fabrics that laminates possessing the best strength properties have been obtained. It is probable that unidirectional fabrics will be employed in making many highly stressed parts as designers become more familiar with them.

A third, and still more recent, group of glass fabrics developed for plastics reinforcement is known as eight-shaft satin weaves. This construction is a variation of plain weave, having substantially the same strength yarn in warp

and filling. The fabrics are woven so that each warp and filling yarn goes under seven and then over the eighth yarn, instead of going over one yarn and under the next. Satin weave fabrics are well known in the textile industry and may be four-shaft, six-shaft, and so on. The eight-shaft design seems to offer the best possibilities in glass fabrics for plastics reinforcement. This construction has a long float or length of uncrimped yarn, so that the strength of the yarn may be more completely utilized. The cloths do not provide as high strength properties as the unidirectional cloths, but they have bidirectional properties substantially better than plain weave fabrics of comparable thickness. For this reason, it is not necessary to cross-laminate them.

Fiberglass reinforcements provide the plastics industry with a material that engineers and designers can think of in terms of the metals and their uses. It is a material, however, that can be fabricated without costly dyes, that is perfectly elastic, that doesn't corrode, that has good dielectric strength, and that possesses an intermediate modulus that can be varied to suit requirements. Designers and engineers are now studying use of glass-plastic laminates for such products as railroad car, bus, automobile, truck and trailer body parts; for boats and canoes; for luggage and furniture; for piping; for kitchen and bathroom assemblies and home appliances. Use of the material for civilian plane parts is a natural transition from its use in war planes.

#### Fiberglass-Asbestos Fabrics

Fiberglass-asbestos cloths and tapes are woven from yarns composed of continuous glass filaments and Underwriters' grade asbestos fibers. In some constructions the warp yarns are composed of glass alone, with a fill of the glass-asbestos yarns. In other cloths, both the warp and fill are glass-asbestos yarns. The glass-asbestos fabrics possess higher abrasion resistance than all-glass fabrics. They have good tensile strength, and, like all-glass fabrics, are incombustible. They maintain their strength and flexibility at high temperatures. Developed during the war, their major fields of use are in the electrical and aircraft industries.

#### Coated Fabrics

Destruction by fungi of organic fabrics used in the Pacific theatre during the war led to a demand for fabrics that could resist fungi attack. One result of the demand was the development of resin-coated and synthetic-rubber-coated fiberglass fabrics. These coated fabrics have high tear strength, withstand repeated flexing, are resistant to mildew and other fungi, and have high dimensional stability. Other properties vary with the coating employed, but coated fiberglass fabrics are being produced which are flame-proof and have high resistance to moisture penetration and to the effects of contact with gasoline, oil, chemicals and greases. Now available in several colors, potential applications include partitions, covers, backstops, curtains, awnings and coverings for upholstered furniture.

The inflammability of awning materials has long made awnings a hazard, and has resulted in restrictions on their use where their decorative effect would otherwise cause them to be installed. Coated fiberglass awnings would eliminate the fire hazard, and would stand up against the rot that destroys many awning materials. The incombustibility of coated fiberglass furniture coverings would be an asset for



Fiberglass fabrics are available in a number of weaves and weights, in varying colors and many printed designs. The fact that they will not burn is of particular importance in places of public assembly where use of inflammable decorative fabrics constitutes a serious hazard to human life.



# COLORED YARNS of First Quality

Raw Stock and Package Dyed  
For the Bedspread and Upholstery Trades

WRITE for samples . . . and whenever  
you have a tough yarn problem, bring  
it to Dan River. Developing better  
yarns for many types of fabrics is our  
specialty.

- 14's and Coarser –  
Single and Plied carded –  
Natural and Colored –  
Specialty yarns for  
Industrial uses.

---

## FIBER BONDED\* YARNS FOR INDUSTRIAL USES

Higher Tensile Strength  
Abrasion Resistant  
Stretch Controlled

It's New – It's Versatile – It's Revolutionary

*Yarn Division*

**DAN RIVER MILLS**

(Riverside & Dan River Cotton Mills, Inc.)

**DANVILLE, VIRGINIA**

\*Reg. U.S. Pat. Off.



indoor furniture. Outdoors, the rot-resistant property of the material would be a great advantage.

Ever since fibreglas fabrics were first produced in the 1930s it has been recognized that they possess properties that make them of unusual value as decorative materials. The fact that they will not burn, for instance, makes them particularly suitable for use on shipboard and in places of public assembly—theaters, night clubs, hotels and schools—where the presence of inflammable fabrics constitutes a serious fire hazard. It is true that inflammable fabrics can be flame-proofed, but the flame-proofing is impermanent. If the fabrics are to remain fire-safe they must be re-treated at regular intervals. This can involve a very considerable, recurring expenditure. It has been stated that the cost of flame-proofing fabrics in the New York City public schools is more than \$300,000 a year.

In the home, the features of fire safety is of lesser importance, for there is not the same danger of mass panic that there is on a ship or in a theater, night club or school. But the fact that fibreglas fabrics will not shrink or stretch, that moths cannot eat them, and that they resist the attack of mildew or other fungi, makes them suitable for wide use in the home. This is particularly true of homes in tropical or semi-tropical climates, or at the seashore where salt air and strong sunlight play havoc with some of the more familiar decorative materials, and where high humidity often causes other materials to stretch or sag.

Until very recently the chief obstacle to the wide use of fibreglas decorative fabrics has been the complete imperiousness of the glass fibers and the consequent lack of any satisfactory method of dyeing them or printing designs upon them. The molten glass batch could be colored, but when the glass was drawn into fine fibers the colors became so attenuated that only pastel shades could be obtained. Because of the high temperatures, only ceramic colors could be incorporated, imposing an additional limitation. The range of possible colors was very small and there was no way of obtaining printed designs. This obstacle has now been overcome. Methods of dyeing and printing the fabrics with resin-bonded pigment dyes have been developed and are constantly being improved. As a result, fibreglas decorative fabrics are now available in a rather wide range of solid colors and printed designs. The fabrics have excellent fastness to light. They can be dry cleaned provided

due care is taken in handling them. Some of them can be washed. Superficial dirt can be wiped off with a damp cloth.

At the present time, fibreglas decorative fabrics are being sold principally for use as draperies or in other applications where they are not subjected to repeated rubbing. In such applications the slight crocking of the dye, or the abrasion of the glass fibers, that may occur if the fabrics are repeatedly rubbed, is not a serious consideration. The extent to which fibreglas decorative fabrics will be used for other than these applications is still being explored, but shower curtains and lampshades are now commercially available. Combinations of glass fibers with other fibers—rayon, linen, cotton or silk—also offer unusual possibilities in decorative fabrics. Here the glass fibers are employed both for design effects and to give added dimensional stability to the fabrics—or to resist wrinkling as in the familiar fibreglas neckties. Research in such combinations was under way before the war, and has been resumed in recent months, but it is still in its initial stages.

A very recent development of major significance is the production of superfine glass fibers with diameters less than nine one-hundred-thousandths (0.00009) of an inch, as contrasted with standard glass textile fiber diameters ranging from 23 to 38 one-hundred-thousandths (0.00023 to 0.00038) of an inch. These fibers are being twisted and plied into yarns that are extremely soft and fleecy to the touch, and that can be used for weaving decorative fabrics, combination fabrics, and coated fabrics.

The Fibreglas Corp. is now investigating markets for the superfine fibers, yarns and fabrics. In mass form, the fibers appear to be suitable as warm, lightweight interlining for mittens, sleeping bags, and cold-weather outdoor clothing. The fibers can be "drafted" to vary the yarn size for the desired fabric application. Fabrics woven of the yarns are softer than fibreglas fabrics hitherto available. They drape in soft, attractive folds. Wide use for them is foreseen as quality decorative materials. At their present stage of development, fibreglas fabrics are not suitable for wearing apparel. Research aimed at expanding the fields of use for fibreglas textiles is unremitting. Whether future developments, along the line of the new superfine fabrics, will open up the wearing apparel field to fibreglas cannot be clearly foreseen at this time.

## The War Years at Dan River

—The Outstanding Achievements of a Southern Organization—

**One of the best known textile manufacturing firms in the United States is Riverside & Dan River Cotton Mills, Inc., with headquarters at Danville, Va. This organization added greatly to its reputation during World War II, as may be realized by reading the accompanying article.**

**T**HE war years at Riverside & Dan River Cotton Mills, Inc., provided an extraordinary stimulus to the entire organization, particularly in the way of improvements in mill operation and in general and specialized technology.

No less important was the development of a very comprehensive program of vocational training. This has grown rapidly in size and scope and has met with an encouraging reception from large numbers of the operating staff. Educational facilities measuring up to the very best standards have been provided in two textile schools, and particular attention is being given to the training of veterans.

The veteran training program, under the G. I. Bill of Rights (P. L. No. 346) is tied in with the veteran re-employment policy of the company under which 2,500 veterans have already been re-employed, and for which the





# PATTERSON MILLS COMPANY

ROANOKE RAPIDS, N. C.



TICKING  
UPHOLSTERY  
FABRICS  
DRAPERIES

# ROANOKE MILLS COMPANY

ROANOKE RAPIDS, N. C.

Colored Outing Flannels  
Wide Upholstery Fabrics  
Wide Tickings





company on Jan. 27, 1946, was awarded World War II re-employment flag. Maj.-Gen. Lewis B. Hershey, national director of Selective Service, participated in the ceremonies, and Gov. William M. Tuck of Virginia was among the distinguished guests of George S. Harris, president of the corporation. Mr. Harris, in his speech of acceptance of the award assured the veterans that the mills would be kept going full time to provide jobs and steady work.

One of the two textile schools, known as the Riverside Unit, is located in the research building in downtown Danville. This comprises a departmentalized and fully equipped textile mill for the use of employee-students and various class rooms and equipment. The second and larger school, known as the Dan River Unit, is maintained at Schoolfield. Full four-year courses are taught by a staff of instructors in every phase of textile education. Especial emphasis is placed on chemistry, in which a full-year course is available.

The program for training chemists under the G. I. Bill of Rights is already under way. Graduates who show particular aptitude for chemistry will be available either for the company's research engineering division, or for mill production work. Enrollment in the textile schools was 685 during 1945 and is expected to reach the present capacity of 1,000 very shortly. Plans have been made for an expansion of facilities to accommodate 2,000 students.

The company has arranged a plan whereby an employee may enroll for any specialized technical course of either International Correspondence Schools or LaSalle University, and if he completes the course, one-half the cost will be refunded to the employee by the company. The policy of the company is to assist any employee to obtain whatever type of education he may choose, the particular incentive to the employee being that he has the opportunity to raise his own pay level by the ratio of his own ambition and willingness to study and work.

### Research and Technology

By 1942, research activities of the company had become of such broad character that a separate research division was set up, and in the fall of 1945 complete integration of all of the company's chemical research and experimental engineering facilities was consummated in a new division

known as the research engineering division. This division is now domiciled in its own modern building in downtown Danville. The total floor area, all on one floor except for an experimental dyeing section on an adjacent floor which is operating on new processes in resin-pigment dyeing, amounts to 23,500 square feet.

This area provides ample space for 12 chemical and physical laboratories which have been newly-equipped throughout and in accordance with the most modern engineering practice. Four large sections have been given over to pilot mills devoted largely to the development of various Fiber Bonded processes as applied to cotton and other textile rovings and yarns, and to chemical treatments of fabrics. The machine shop is a newly equipped, self-contained unit, devoted exclusively to the service of the research division and to the building of new types of machinery used in the Fiber Bonded yarn and Dan River fabric processes.

Adjacent to and fronting the laboratories and pilot mills are the executive offices, the library, and the engineering office.

The scientific staff of professionally trained members is comprised of 13 chemists, four engineers, two physicists, 13 technical personnel not included in above—a total scientific personnel of 32. The administrative clerical, maintenance and similar personnel, engaged exclusively in work of the research division, is 16. These give a total laboratory personnel of 48 persons.

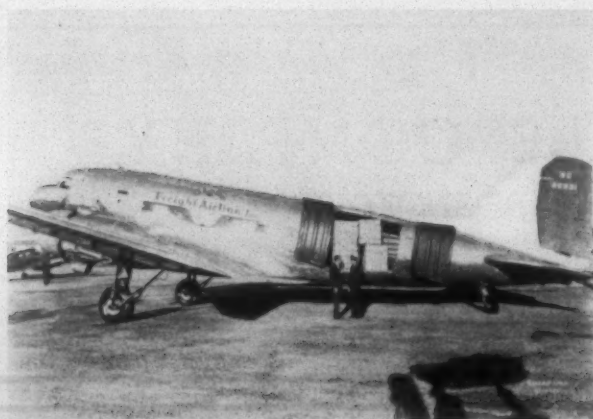
It should be emphasized that this personnel, which is engaged exclusively in research, does not include engineers, chemists and physicists stationed in the control laboratory and those engaged in specific production duties in the laboratory of the finishing and dyeing plants of the company. Nor does it include members of the technical staffs of the two vocational training schools.

The policy of the company to throw open to the industry the various processes developed by Dan River research is based upon the fact that commercial applications of the processes are developing in such volume that one organization, no matter how heavily staffed with research men, could not pursue all of them effectively. Thus it was found necessary to provide a licensing system so that the full potentialities of these processes may be exploited. Team work with other manufacturers will do that.

### Continuous Pigment Vat Dyeing

Perhaps the most outstanding technological development in Dan River's commercial mill operations during the war was the invention in 1942 by a member of the research staff of the continuous pigment vat dyeing process. This made possible the mass production of Army fabrics of the proper depth of shade on an unprecedented scale. The knowledge of this process, without which the necessary yardage of Army fabrics of the required shades could not have been produced by the old pigment-pad-jig method, spread quickly to other mills and finishing plants, and many millions of yards were produced for the Army at a very large saving in costs. Many advances in finishing technology, such as the open-width bleach and shrinkage control which avoids working loss, were perfected.

Commercial applications of the Fiber Bonded processes,



Henry Rose, president of Midland Fabrics Co. at New York City, speeds three tons of upholstery fabric on its way. The shipment was flown March 2 from Atlanta, Ga., to Hartford, Conn., to expedite production in an East Hartford furniture plant. With Mr. Rose is the transport plane's pilot.



# Some People Leave Things to Luck!

BUT . . . *most* people like a sure thing better. They insist on dependable quality and consistent good service — frown on haphazard methods of doing business.

Dependability has always rated tops with Dundee. Year after year we have underscored its importance in all business transactions as well as in the constant quality of our products. This allegiance to high business standards has won for Dundee the confidence of our customers everywhere.



## *Dundee Mills*

INCORPORATED

GRIFFIN, GEORGIA



*Manufacturers of Famous Nationally Advertised DUNDEE TOWELS*

Plain and Name Woven Turkish Towels — Huck  
Towels — Dish Towels — Toweling — Crashes —  
Damask Table Tops — Napkins — Diapers

*Showrooms:*

40 Worth Street, New York, N. Y.



which have aroused a constantly growing interest throughout the industry, have expanded beyond expectations. Licenses for this process have been granted to other manufacturers as rapidly as was possible under the handicap which war-time restrictions placed on the production of new and highly specialized machinery. Now that working arrangements have been made with Walter Kidde & Co. for the production of commercial machines, licensing of the processes is going forward in volume.

The resin-pigment dyeing processes developed and owned by Dan River have been subjected to large experimental runs in several of the largest finishing plants in the South,

and have now reached a stage where licensing will soon be begun.

With a view to developments and changes in textile mill machinery, Dan River has installed in its general machine shops at Schoolfield, some of the largest machine tools that are built.

Practically any machine operation that may be required in the maintenance of textile machinery, or in the production of new types of machinery parts, may now be performed by these machine tools. This type of machine tool is believed to be a new departure in textile mill machine shop equipment.

## Safety—Whose Responsibility?

By E. G. PADGETT, Director of Safety  
North Carolina Industrial Commission

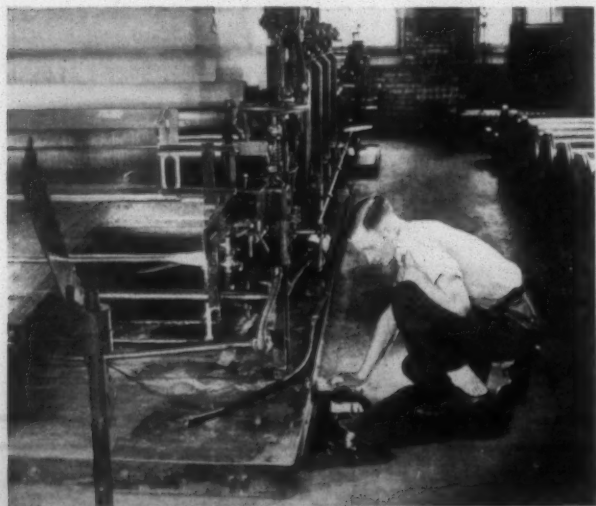
**S**AFETY is the joint responsibility of management and labor. Neither can function without the other and each needs the other in accident prevention as much as in any other phase of industrial life. Each has an equal share in the responsibility of seeing that the plant is a safe place in which to work and to produce the goods it was set up to manufacture. True, management must realize that accident prevention is just plain good business, and when made an operating policy will pay real dividends in increased production, better quality, fewer seconds and improve employer-employee relationship. It must realize that accident prevention endeavors are just as important as any other activities necessary for a smoothly operating plant, and it is not something to get all hot and bothered about today and promptly forgotten tomorrow. No industrial safety program can hope to succeed in a plant where management is wishy-washy about accident prevention, or gives the subject no thought until visited by the insurance company's safety engineer or a representative of the state or national departments of safety. One of the first lessons I learned when I started in the accident prevention field was that "safety has

to percolate from the top." This is just as true today as when it was first said a number of years ago, but some of us have overlooked the fact that labor plays a part in this thing, too, and that it, too, has a little responsibility in safety. I sometimes think some of us have overlooked and are still overlooking a good bet in not trying to impress upon labor that it has a very definite stake in accident prevention work. For years we have heard the cry, "Sell management—sell management!" but the voice crying "Sell labor" seems to be very weak and is sometimes lost in the noise made in the front office. Yes, sell management, by all means; that must be done, but don't overlook selling labor.

That we have not done an outstanding job of selling labor can readily be seen by the attitude a good many employees have toward safety rules and regulations supposedly formulated for their comfort and protection. Goggles, gloves and other personal protective equipment are worn only so long as the supervisor is around. Horseplay and other unsafe acts take place behind the supervisor's back. Sure, the overseer can snatch one or two up by the back of their necks and fire them and everything will run along smoothly for a few days. But before long, we have the same old thing over and over again.

Too often employees feel safety rules and regulations are put into effect by the company purely from a selfish standpoint in order that more profit may be made with which to increase the dividends to the stockholders. Part of this feeling is caused by the failure of management to give labor an active part in the setting up and the operating of the plant safety program. Labor is seldom invited to the meetings held for the purpose of formulating safety rules and regulations under which the plant is to operate. As a rule, they know nothing about it until a rule book is placed in their hands, and are told that now that they have copies they will be expected to follow each and every rule in the book. It would seem to me that inasmuch as labor is expected to obey these safety rules and regulations it should be represented when they are made, or at least given an opportunity for expression of opinion. Remember, management and labor are jointly responsible for safety in the plant.

Then, too, labor is not always represented on all safety



Safety authorities warn textile workers not to put someone else on the spot, but to wipe up oil or grease that has been spilled.



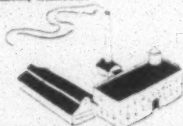
(AN ACTUAL CASE FROM THE FILES  
OF MEINHARD, GREEFF & CO., INC.)



In 1941 a Superintendent of a worsted mill . . . young, aggressive, intelligent . . . decided to open his own mill. His assets: \$5,000 (a down payment on 12 second-hand looms) ambition, integrity, ability.



He came to Meinhard, Greeff . . . laid his cards on the table. We couldn't finance his tangible assets (there practically weren't any) . . . so we financed the man, himself.



In 1945, after doing \$1,000,000 worth of business, he owned a modern worsted mill building, 24 automatic looms, a complete dyeing and finishing plant, substantial capital.

Just one of many instances of Meinhard's intimate and constructive work with its clients . . . based on common-sense . . . not iron-clad dictum.

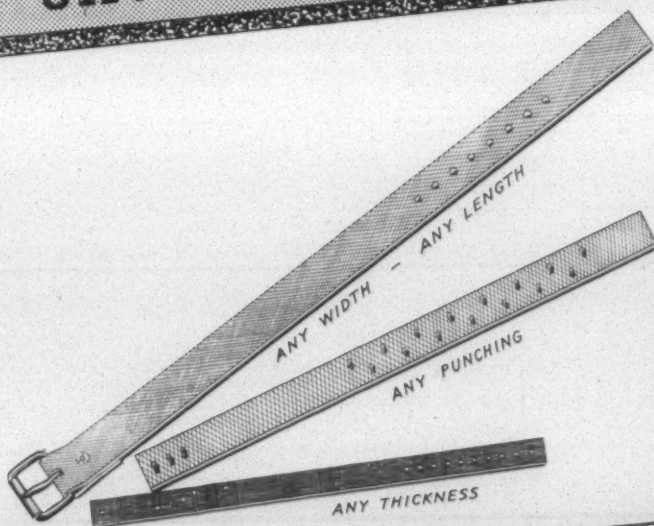
# Financing INTANGIBLES

**Meinhard, Greeff & Co., Inc.**

51 MADISON AVE., NEW YORK CITY  
ASBLAND 4-7885

FACTORING FOUNDED ON SERVICE

## SAVE TIME and MONEY . . .



. . . by reducing production delays involved in frequent replacements of broken and worn loom strapping.

FABRIC LOOM STRAPPING—cut and punched to specifications on precision machinery by skilled workmen—is a combination of service and product that means low cost production efficiency.

A pioneer in the field, and backed by years of "know-how," W. D. DODENHOFF COMPANY is prepared to solve your most perplexing strapping problem.

## ... with FABRIC LOOM STRAPPING

PRODUCED BY

**W. D. DODENHOFF CO., Inc.**

619 RUTHERFORD ST. GREENVILLE, S. C.



committees. In the larger industrial plants we usually find a workmen's safety committee, a plant safety committee, and where two or more plants are operated by the same company, a central safety committee. In any number of cases workmen are represented only on the workmen's safety committee, and I personally do not feel this is a particularly healthy condition. It is not entirely foreign to find that labor becomes just a little suspicious when it is excluded from all safety committee meetings except the lowest in the scale. Labor begins to wonder whether or not this safety business has some secret angles of which it is not aware and of which it should not know; begins to think that if the employees are not good enough to have representation on the leading safety committee just who profits the most by the safety program. Do you think this is far-fetched? If so, just talk with some of the workmen, especially some of those who carry chips on their shoulders most of the time and just waiting for a little puff of wind to blow them off. All safety committees, if they function properly, have meetings for one purpose only—to see what can be done to reduce or completely eliminate accidents that occur in the plant. There is nothing secret about it, and there are no trade secrets to protect. It would seem, therefore, there is no real reason why labor should not be represented at every one of the safety meetings, regardless of type.

One of the nicest safety committee meetings we have attended in a long time was that held by a small textile mill employing some 22 persons. These meetings are held monthly and each is a dinner meeting with the cost of the meal paid by the company. The general manager is always present, but does not attempt to control the meeting in any way. The chairman of the committee is the plant superintendent, and the other members come from the supervisory personnel and the employee group. At each meeting, two employees who have never served on the committee or who have never attended a committee meeting are invited to attend. In this way, prospective members have a working knowledge of the functions of the committee before they in turn are asked to serve. Each recommendation made by

the inspection committee is read and each is assigned to the proper department head. Within five days after the meeting the department head receiving an assignment must make a written report to the general manager as to just what measures were taken to correct the situation. A record of each recommendation is kept in the minutes of the safety committee and checked off at the next meeting. With such active support by both management and labor it is no wonder that this particular mill consistently turns in an excellent safety record.

Safety being the responsibility of everyone in the plant, any plant management attempting to shift this responsibility to any one individual or any one department, so as to make that individual or that department responsible for accidents that occur in the plant, is only laying up a lot of grief which sooner or later will come back to its doorstep.

The safety engineer is not responsible for the accidents that occur in his plant. He is a staff, not a line officer, and as such his job is to advise as to how best to operate a safe plant. He certainly has no business assuming or accepting the responsibility for accidents. This condition exists in entirely too many instances, either because the safety engineer thinks he is good enough personally to prevent accidents, or because management has forced this responsibility on him and in order to keep his job he accepts it. Neither is the safety department responsible for accidents. The safety engineer does not have the authority to hire and fire; this is a supervisory function. Any plant attempting such a set-up is going to come to grief sooner or later, and very likely sooner than anticipated.

Just because the safety engineer is not responsible for accidents does not mean he has no responsibility—far from it. He has the responsibility of correctly advising management on all matters pertaining to the safety of employees and plant property. He lays out a safety program and submits and sells it to management, not overlooking the fact that it must be sold to labor, too, if it is to prove effective. He keeps management informed, checks on new equipment before it is purchased, looks over the plans for new buildings, assists in plant layout, attends all safety committee meetings, schemes day and night to keep management and employees sold on safety, and a thousand and one other things. Just one thing he does not do and that is to accept the responsibility for accidents.

That the foreman is the key man in industrial accident prevention has been drilled into us for years, and the statement is true. This we realize. However, even the poor foreman can get just so far without the active support of those above and *below* him. He has a mighty difficult job if top management does not back him up and take an interest in all his problems, including the safety problem. By the same token, he is also going to have a difficult job if his employees do not go along with him in all policies, including safety. The modern, up-to-date foreman realizes he cannot successfully run his department as it was run 20 or 25 years ago. You just do not tell your employees to do this or do that with no explanation as to why. Employees are thinking more today than they ever did, and they like to know why they do a certain thing a certain way, or why this particular method is not as good. In the main, they are reasonable. They want to do an honest day's work for an honest rate of pay. They do not want to have an injury, and they do not want to see one of their fellow employees have an injury;



Goodyear Decatur Mills at Decatur, Ala., has been named winner of the Slusser Safety Trophy and the annual interplant safety contest sponsored by Goodyear Tire & Rubber Co. Shown with the trophy are (left to right): Jack Kidney, the plant's safety director; Cliff Slusser, Goodyear vice-president; and S. A. Steere, manager of the company's cotton and fabric operations. Employing 1,500 men and women, the Decatur plant had but ten lost-time accidents last year for a frequency-severity of .297. Superintendent of the mill is C. W. Young, and W. H. Hunter is personnel manager.



*"Right  
Combination"*



## Dependable Mill Supplies and a Dependable Mill Supply House

Among the well known lines that we carry are the following:

GRATON & KNIGHT CO. . . . .	Research Belting and Textile Specialties
H & P SPOOL & BOBBIN CO. . . . .	Small Bobbins and Fibre Head Spools
DAYTON RUBBER MFG. CO. . . . .	Pickers and Lug Straps
CHARLOTTE MANUFACTURING CO. . . . .	Card Clothing
BARBER MANUFACTURING CO. . . . .	Spinning and Twister Tapes
FIELDS MANUFACTURING CO. . . . .	Slasher and Clearer Cloth
NATIONAL VULCANIZED FIBRE CO. . . . .	Fibre Cans, Trucks and Boxes
WINSLOW BROTHERS & SMITH CO. . . . .	Sheep and Calf Skins
U. S. RING TRAVELER CO. . . . .	Travelers—Spinning and Twister
HOLBROOK RAWHIDE CO. . . . .	Rawhide Pickers
MANNING, MAXWELL & MOORE, INC. . . . .	Valves and Steam Specialties
S K F INDUSTRIES . . . . .	Anti-Friction Bearings
BROWN & SHARPE MANUFACTURING CO. . . . .	Machine Tools and Cutters
WORTHINGTON PUMP & MACHINERY CORP. . . . .	Pumps and Compressors
AMERICAN PULLEY CO. . . . .	Transmission Equipment



# THE TEXTILE MILL SUPPLY CO.

MILL, FACTORY AND MACHINE SHOP SUPPLIES

CHARLOTTE 1, N.C.

1300-10 S. Mint Street

Telephones 5125—5126



therefore, today's foremen explain these things to them. Explains why a certain operation is necessary, why a job should be done a certain way, how an accident might happen and what it would mean to the company and to the injured employee. In other words, today's foreman *sells* his employees, and becomes really a leader instead of a driver. Workmen appreciate this attitude and we all know you can catch more flies with sugar than you can with vinegar. To-

day's foreman is still a representative of management, and of course is supposed to have management's interest in mind at all times. However, today's foreman realizes that he can best serve management's interest by having a happy, contented, interested, loyal, accident-free group of people performing in his department. He is still the key man and as such exerts every influence to keep management-employee relationship tops.

# Safety Training for the Textile Industry

By W. G. MARKS, Director of Training and Safety  
Erwin Cotton Mills Co., Durham, N. C.

**F**ORMALIZED training in the textile industry is comparatively new when we make a comparison with other types of industry such as steel, utilities, oil, etc. Because of the newness and the fact that the average textile employee is not fully accustomed to formal training we must proceed slowly, yet effectively, to teach our workers the ways and means of preventing industrial accidents.

Rather than attempt any type of idealistic set-up of training programs, I will outline those plans which in our organization have proved successful and which, by necessary revisions, would be adaptable to any textile mill.

## Preparation of Course

In preparing the first basic course several years ago for our supervisors we decided that this course should be practical and yet extensive enough to give the supervisor a thorough knowledge of how to conduct his safety program virtually unassisted if necessary. Looking around for material, we decided to condense the U. S. Department of Labor war training safety course and add to it specialized topics related to textile safety.

In finished form we had put together material covering 40 hours of instruction, visual education and classroom discussions. This course embraced virtually every phase of safety engineering with which a supervisor would come in contact. Supervisors in our mills from the plant managers to the second hands or assistant overseers took this basic course. Using prepared skits, demonstrations, and films we were able at each meeting to keep the interest high, securing active group discussions, and at the conclusion of the course a written examination revealed most satisfactory knowledge of safety subjects.

With this job finished, we next asked ourselves what other types of related training a supervisor should have that would aid him to do a better job of selling and promoting safety. Knowing full well that one of the problems every supervisor has is that of directing people and adjusting situations, we decided on a second course dealing with the fundamentals of foremanship with particular stress being given to safety. A series of commercial films was used with 20 hours of discussions to give our supervisors a better knowledge of how to handle people, maintain discipline, adjust grievances and other similar topics.

Finally a third training class was found necessary for supervisors in connection with our general training and

safety program. This was the well known Job Instruction Training course which aimed primarily at the more rapid induction of new employees, but in addition gave us another chance to emphasize safety with production and to get each supervisor more familiar with the requirements of his various jobs. These three courses given over a period of two years were not excessive in discussion hours. Given on company time, they have proved to be sound investment in terms of greatly reduced accident rates.

## Employee Training

As yet, we have said nothing about types of employee training. Starting with the new worker, let us see just what kind of training can be given the individual who in most cases is unable to attend a formal class. The one exception to this is probably the induction meeting at which many new employees meet in classes to receive specialized instruction either before going to work or during the first week.

Many induction classes in industry are held for at least four hours. An hour and a half of this time will be spent on safety training as the first step toward bringing to the worker a full realization of the needs in our safety program. The very small plant can give this same instruction informally that in the larger mill must be covered in group meetings, but some one person must assume responsibility for talking to new workers.

Most job instruction given by other industries to the new employee is now an integral part of textile mill operation. To teach the actual operation of the machine, much of our safety training is done by the immediate supervisor. During the first part of the war period we trained approximately ten per cent of our employees to be job instructors.

Safety was one of our paramount issues, and in the follow-up of this course our safety division worked with every department to see that job breakdowns took safety into consideration to an even greater degree than was recommended by the authors of the text in J.I.T.

## Safety Committees

Having given supervisors a complete training course in safety, we also have provided some formal safety training through the medium of all-employee safety committees. Employees serving on these committees were originally given an hour of safety instruction each month by their



supervisors (committee chairmen) or the safety director. Films and other visual aids were used in covering essential subjects as the investigation of accidents, housekeeping, plant inspections, etc.

Through these committees has come our greatest single benefit from all phases of our safety program. At each safety committee meeting the supervisor spends a part of the time in actual instruction, using demonstration devices and outlines furnished by the safety division. These meetings, held on company time, are in effect miniature classrooms at least for a part of the time during each committee meeting.

Of course, the usual poster program is carried out in the mills, together with various types of safety contests where personal awards are given to all winning employees. More recently, as part of our training we have begun to show safety films to entire departments on company time and in the department concerned. The reaction from workers has been excellent and consideration is now being given, to expanding this form of group training.

So far nothing has been said of our safety instruction manual, which was developed by safety committees for each

mill and which we feel is one of the most complete yet produced in the textile industry. This manual of course is the basis for much of the instruction work given in our induction meeting and later through the safety committees and supervisory contacts with the average employee. We believe a complete safety manual is a "must" in every training program.

This outline of training in Erwin Cotton Mills Co. covers the essential parts of our formal and informal accident prevention training. It has been particularly effective because top management participates in and actively supports the program. This we all know is the prime requisite of any undertaking in industry.

This same general type of program could work equally well in any size mill after it has been adapted to meet the local needs, and should bring about a speedy reduction in accidents if it is conscientiously applied.

People learn by doing and often by making mistakes, but we take the viewpoint that people will learn more quickly and make fewer mistakes if we spend the time that was normally used for correcting mistakes on constructive training.

## Color Conditioning and Its Relation To Textile Manufacturing Operations

**D**URING the war years the finishes division of E. I. du Pont de Nemours & Co. introduced a revolutionary new system of industrial painting. Test installations were made in plants throughout the country—several in Southern textile mills—with impressive results.

Principle objectives of the Du Pont system—called "Color Conditioning"—are improvement of seeing conditions within the plant, increased production, lower accident rates, and a general elevation of management-employee relations. The first basic fact recognized in color conditioning was that eye strain causes a general physical debility, resulting in headache, dizziness, nausea—and in turn in reduced efficiency of labor, in lowered resistance to accidents, in lowered morale.

But how could you reduce eye strain, particularly in jobs where the use of the eyes was a critical factor in efficient operations? Beginning at the near vision point, it was found that the vast majority of machines were traditionally painted a dark color—light was absorbed rather than reflected. Answer: paint machine bodies light colors—horizon gray, blue or green. And in order to accentuate the actual working area, to help the eyes see the job, paint working parts such colors as spotlight buff or spotlight green to contrast with the body color. This scheme for painting machinery was called three-dimensional seeing.

Results of taking this step were excellent. But the complete solution of the problem was still to be attained. Now that the eyes had been relieved of strain factors in the immediate working area, what further causes of eye strain remained to be eliminated? Answer: glare—the brilliant unnatural light reflected from white walls, light that isn't

light at all in the *seeing* sense. The solution to the problem then resolved itself into the selection of proper colors for walls—colors that would provide an area of visual relaxation, that would promote better illumination by reflecting "seeing" light rather than glare.

The Du Pont color conditioning colors came into being through years of patient research. They are not "decorator's colors"—housewives wouldn't class them as "lovely" or "exquisite"—they are utilitarian, functional, designed solely for industrial use. They provided a background that offered



Color Conditioning as applied to equipment of a textile plant at Winston-Salem, N. C. Notice the improved illumination resulting from the use of a



visual relaxation, reduced glare to a minimum, did not clamor for attention and distract from the work at hand. Through the use of these colors rooms that are excessively warm may be psychologically cooled, and vice versa (one plant had a thermometer reading to the contrary—"cool" room—women employees constantly complained, wore heavy sweaters to work; the room was painted in a "warm" color conditioning color—employees left sweaters at home, commented on the improved working conditions, increased warmth).

All of this may be dismissed as theory—except for one very important fact. Color conditioning *works*. The entire principle of the program was scientifically proven before the first pilot job was undertaken. From that point on, it was a case of proof under actual operating conditions. And it did just that. Hundreds of industrial organizations

applied color conditioning principles to their plant painting and found that the net result was exactly the goal toward which Du Pont originally aimed—better working conditions, increased production with fewer rejects and seconds, fewer accidents, improved employee morale, better plant housekeeping. In short, color conditioning made their plant a better place in which to work.

Another phase of color conditioning embraces the Du Pont safety color code, a standardized system of colors and symbols that identify plant hazards, make dangerous areas stand out, spotlight the location of fire-fighting and first aid equipment, promote safety by making safe practices unavoidable. In addition to the color conditioning program, Du Pont has announced improvements in industrial finishes, chief among them being greater resistance to mildew and the effects of fumes.

## Dyeing and Finishing

# The American Dyestuff Industry

**B**ACK in 1856 William Henry Perkin was trying to synthesize quinine. His work resulted at one stage in a tarry mess, which, he discovered by accident, would dye silk. This mauve dye marked the beginning of synthetic dyes.

The origin of the American synthetic dyestuff industry goes back to the Civil War era when Thomas Holliday founded in Brooklyn, N. Y., the first coal tar dyestuff plant in this country. Four years later Arthur Bott, a disciple of the German chemist A. W. von Hofman, incorporated the Albany (N.Y.) Aniline and Chemical Co., to manufacture magenta from a chemical known as aniline arsenate. But, our national progress in this chemical field was not rapid.

Even in the closing years of the last century we were borrowing much of our knowledge of dye chemistry from Germany, which was to lead in this industry for many years, as subsequent events proved. The fact that the United States lowered tariffs on coal tar dyestuffs was not conducive to the development of our own industry. For years we relied largely on imported dyes. From 1880 to 1914 the great growth of the dyestuff industry took place in Germany.

By the time World War I started in 1914, only seven United States plants were manufacturing coal tar dyestuffs. They had 528 employees and produced less than seven million pounds of dyestuffs a year with a value of only 2½ million dollars. By 1915 supplies of dyes and their intermediates in this country were getting more and more scarce. It was in this year that the German submarine *Deutschland*, after a daring voyage across the Atlantic, landed at Boston with a cargo of valuable dyestuffs. The entry of the United States into World War I in April of 1917 might be said to mark the definite start of modern American dye making.

In the dark days of World War I our dyestuffs were an ineffective substitute for those which we had long imported.

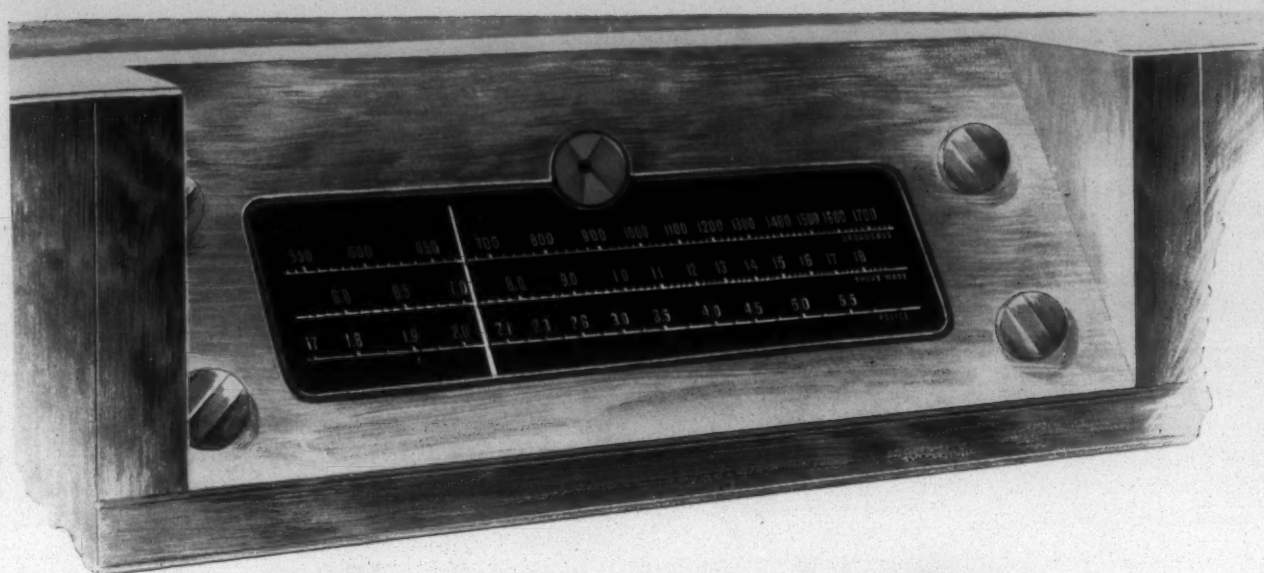
Not only were they costly, but they were decidedly inferior. They changed color when exposed to sunlight or to the air. They were not fast and they took unkindly to such things as washing, dry cleaning or perspiration. At best they were a wartime makeshift and a sad reflection of our pre-war reliance upon other countries for the dyes we used here in such huge quantities. During the summer of 1917 the needs of woolen mills were being met better than the needs of cotton mills. Fast dyes in all the primary colors suitable for use on wool were available in adequate quantities. The development of cotton dyes did not progress so satisfactorily. Fast blacks of good quality were available, but indigo, the most important cotton dye, was being made at only a small percentage of the normal consumption. In 1918, United States dye production was 58,464,446 pounds, valued at \$62,626,390.

### Growth of American Production

Following the end of World War I, and despite a post-war depression, resolute and far-seeing American chemists determined to build for this country its own dyestuff industry which would ultimately make us forever independent of the rest of the world for the valuable and useful chemicals which we applied to an ever-increasing variety of products. Laudable as was this goal it was one not easily nor quickly achieved. Leadership in dye making was still held by Germany and it was to that country even in those days that we had to look for help and aid to produce and apply synthetic dyestuffs. The story of the development of our American dye industry in the past quarter-century is both long and complicated.

To begin with, we were many years behind in the technology of dye making. We had far to go to catch up. To do this our scientists, chemists and technologists were com-





## Easy to get results *with* **DIASTAFOR** de-sizing agent

**Type L is an all-purpose de-sizing agent which works smoothly in wide ranges of temperature and pH**

DE-SIZING can be as simple as tuning your radio if you use Diastafor, the all-purpose de-sizing agent.

That's true even when sizing formulas contain many different ingredients. If you knew all the ingredients other than starch, your de-sizing problems would be simple. But when most every lot employs a different warp sizing you need a de-sizing agent that will work in a wide range of temperatures and pH: Diastafor—Type L.

When you use Diastafor the results prove

its quality throughout your bleaching and dyeing operations. You get a fine, soft, slinky "feel" in your finished goods, whether cotton, or rayon, or mixtures; dyeing is even and unshaded—no streaks, no blemishes.

Diastafor brand de-sizing agents come in various types—one to meet every problem. Diastafor's 38 years of leadership have been earned not only by giving you more enzymes per dollar, but by supplying a product that is as nearly foolproof as we know how to make it.

If you have a de-sizing problem we would welcome the opportunity of assisting you to get results quickly and economically. Our sales and technical staffs are at your service. Address your communication to Standard Brands Incorporated, *Diastafor Division*, 595 Madison Avenue, New York 22, N. Y.

**DIASTAFOR**

A TRADE MARK OF STANDARD BRANDS



pelled to undertake a long, tedious and painstaking study of the voluminous literature of dye making and its related chemistry. They had to conduct countless involved experiments and tests, to undertake research on a scale unprecedented in this country and this industry. We had to train new chemists, new technologists in this exceptionally complicated science. The difficulty and amount of work required to produce a new dyestuff is great. It is necessary to discover the chemical constitution of the product, to determine the intermediates from which it may be manufactured, to develop a commercial process for its manufacture, to run it through the pilot plant stage, and after it has been produced in commercial quantities, to work continuously on the process to lower costs, increase yields and improve quality.

### American Output Rises

Some idea of the growth of this new American industry may be gained from the fact that by 1929 the American dyestuff industry was producing 18.2 pounds of synthetic domestic dyestuffs for every pound produced in the United States in 1914. This figure is even more startling when we realize that in 1914 most of our domestic manufactures were made from imported German intermediate chemicals. Coal tar dyestuffs imported into the United States in 1914 were valued at slightly more than eight million dollars. The value of such imports was roughly the same in 1939. By 1939, for every pound of synthetic dyestuffs imported into this country, there were 23.4 pounds produced here and for every dollar's worth of dyestuffs imported into the United States that year there were \$8.75 worth of dyestuffs made in this country. In that year our dyestuff production totaled more than 120,000,000 pounds.

By 1940 we produced within our own borders 71 pounds of dyestuffs for every pound of imported dyestuffs, or a total of 127,834,000 pounds. We were coming of age in this vital industry and could now look forward to the attainment of the goal of that hardy and courageous band of pioneer chemists who after World War I decided that never again would America be left in a position such as she found herself in 1915.

### The Manufacture of Dyestuffs

The manufacture of dyestuffs is one of the most complex branches of industrial chemistry, the starting point of which is a group of synthetic compounds known appropriately as intermediates, because they are the intermediate compounds between benzene, toluene and naphthalene and the brilliant and varied dyes. Benzene, toluene and naphthalene are obtained by the distillation of coal tar. Then through complex chemical treatment, including oxidation, nitration, reduction, sulfonation, halogenation, alkylation and alkalene fusion, they are transformed into intermediates, the manufacture of which a learned chemist has termed "the most brilliant success of synthetic, organic chemistry."

These compounds of carbon are exceedingly delicate and react readily and always in several directions. For example, while nitrating, some oxidation is almost unavoidable. This, plus the difficulty arising from the formation of isomers (which are products alike in the atomic groups they con-

tain but differing in the relative position of these groups) renders the working out of actual manufacturing processes and their supervision exceptionally difficult. To make a finished dyestuff from coal tar raw materials requires many, many steps, exceptional scientific knowledge, long experience, rigid control of manufacturing operation and the consistent supervision of skilled chemists.

Dyes and intermediates are made in huge cast iron, lead, steel or enamel kettles, some containing agitators and scrapers, and designed to operate at various pressures and at various temperatures, ranging from that of melting ice to that of high-pressure steam. These kettles may hold as much as 32 tons of raw materials, which will require anywhere from two hours to nine days to undergo within them desired chemical reactions which will convert them into dyes which ultimately will bring color into our everyday lives. Throughout their manufacture skilled chemists, trained in the exacting and complex chemistry of dye synthesis, control very closely the chemical reactions which take place inside these huge kettles. In effect their supervision and control assures that the reactions result in the rearrangement of untold billions upon billions of atoms to meet predetermined standard. They juggle molecules, which are known as nature's building blocks.

After the dyestuffs are finally synthesized they must be dried, milled and standardized. Even under the most favorable circumstances each batch must be standardized by blending and by the addition of the proper ingredients to assure the absolute uniformity of shade, strength and other characteristics demanded by the consumer.

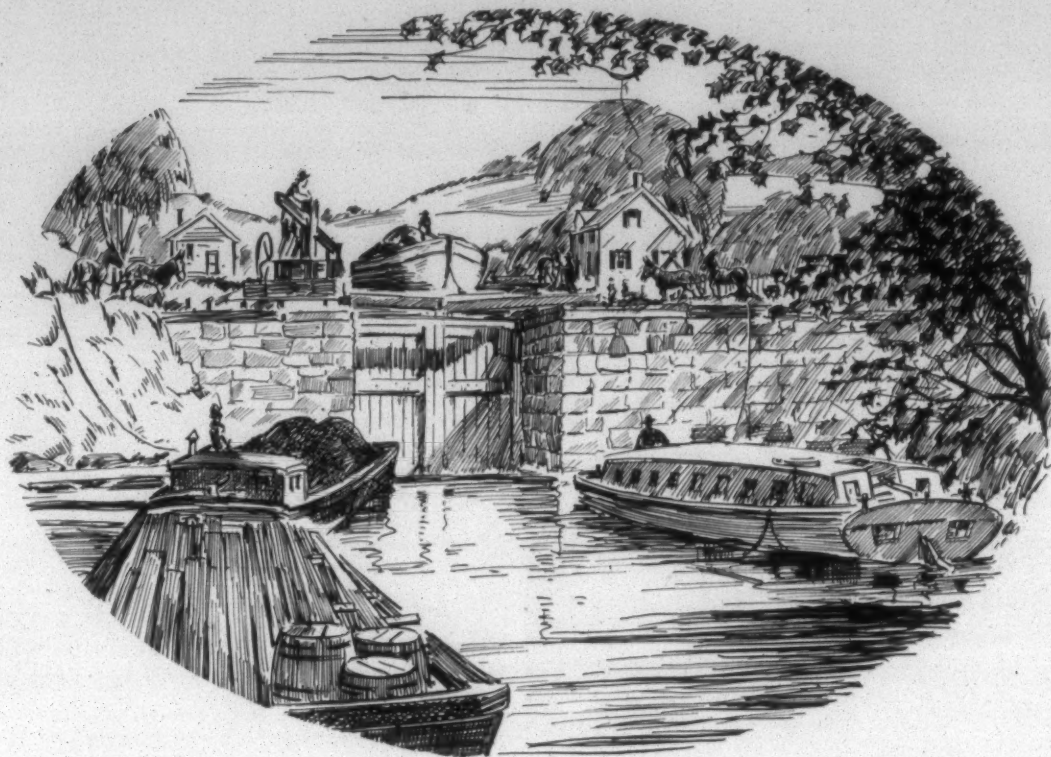
### The Start of a New Dye

New dyes start in the laboratory. Here, trained and highly skilled research chemists starting from scratch in many cases carry on a step-by-step research program to develop new or improved dyestuffs. Not only are these scientists concerned with chemistry, but much of their research deals with physics, reflecting their scientific interest in and curiosity about the physical structure and the behavior of organic compounds. As many as 50 steps may be necessary in the preparation of a single dyestuff and the research chemist may spend several years to develop a color which will have satisfactory light fastness, an affinity for the fiber on which it will be used and the ability to meet many other rigid requirements.

Their work often requires a knowledge of the structure of the raw materials they use. This involves complex studies of the atomic arrangement of molecules. They seek indications of the groups of atoms which go into dye molecules that they may ultimately predict new and more valuable arrangements of these molecules. They constantly seek to learn new details about the behavior of chemicals in order to make these chemicals more servicable and utilitarian. In the research laboratories each year thousands of tests and studies are made of new dyes to learn how they act on application. They are tested on fabrics of many kinds and under many conditions.

Once the research chemists have developed new dyes the job is only partly done. The process development chemists must then set to work to develop actual dye manufacturing processes. Where the chemist in the research laboratory may make only grams of a new product, the factory ulti-





—back in 1820: When the Erie Canal was being built and the population of the United States was less than ten million—nine years before Turkey red was used in dyeing—John Butterworth established this business in Philadelphia to serve the Textile Industry.

It took 126 years of daily contact with the problems and opportunities of the Textile Industry to produce our present-day service to Textile Manufacturers . . . bigger machines to enable increased productive capacity . . . newer machines to meet special problems. We have seen the Textile Industry grow from a handful of family-sized plants to its present position as America's Second Industry. We are proud to have played a part in its development.

Butterworth Service includes a complete line of Machinery for bleaching, mercerizing, dyeing, drying, printing and finishing fabrics and warps; calenders for cotton and rayon fabrics; spinning machinery for rayon filament yarns.

Butterworth Research keeps informed on the new developments in Textiles and Textile-finishing. Butterworth Engineering strives to interpret each new development in terms of Machine Design and Plant Arrangement. Write us.

# BUTTERWORTH

H. W. BUTTERWORTH & SONS COMPANY, Philadelphia 25, Pa.

TEXTILE FINISHING MACHINERY COMPANY DIVISION, Providence, R.I. . . 1211 Johnston Bldg., Charlotte, N. C. . . W. J. Westaway Co., Hamilton, Ont. . . ARGENTINA: Storer & Cia., Chacabuco 443-49, Buenos Aires . . . BRAZIL: Oscar Bandler, Caixa Postal 3193, Sao Paulo. CHILE: Schneider & Cia., Ltda., Casilla 2864, Santiago . . . COLOMBIA: C. E. Halaby & Co., Apartado 139, Medellin . . . ECUADOR: Richard O. Custer, S. A., Quito . . . MEXICO: I. Slobotsky, Avenida Uruguay 55, Mexico, D. F. . . PERU: Custer & Thommen, Casilla 733, Lima. URUGUAY: Storer & Cia., Ltda., Calle Paysandu 1022, Montevideo . . . VENEZUELA: Herbert Zander & Co., Apartado Postal 1291, Caracas.



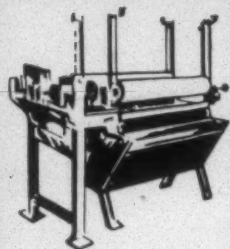
# AHCOBOND S

Trade Mark Reg. Patented.

## A WATER SOLUBLE RESIN BINDER



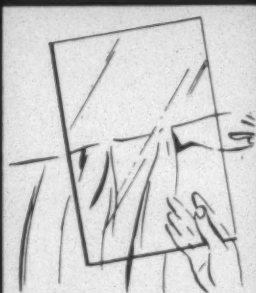
**100% COLD  
WATER SOLUBLE**



**EASY TO APPLY**  
No special equipment.  
No curing.



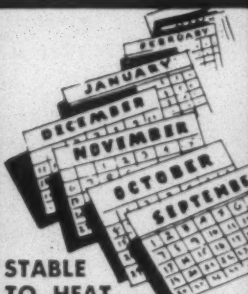
**CLEAN WORKING**  
Will not cause sticky or  
gummy deposits on  
equipment.



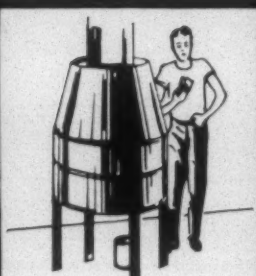
**DRIES TO GLASS  
CLEAR FILM**  
Insures brilliant colors.



**EFFICIENT BINDER**  
Reduces fly and  
shedding.



**STABLE  
TO HEAT  
AND STORAGE**  
Will not develop dis-  
coloration or odor.



**PRESERVES COLORS**  
Will not dull them or  
accelerate fading.



**MORE ECONOMICAL**  
than older types  
of binders.

**AHCOBOND S** was developed to fill the need for a stable, water soluble resin binder, free from organic solvent, for use with starches, gums, fillers and softeners in warp sizing, back filling and similar operations.

Its water solubility and stability make for greatest ease in handling; yet it gives maximum binding action and adds flexibility and toughness to starch finishes.

*Bulletin 121 on request.*

**ARNOLD, HOFFMAN & CO., INC.**

MANUFACTURING CHEMISTS

ESTABLISHED 1875 • PLANTS AT DUNTON, MASS. AND CHARLOTTE, N.C.

PROVIDENCE, RHODE ISLAND

NEW YORK

BOSTON

PHILADELPHIA

CHARLOTTE



mately will have to produce this product in pounds. But before this can be done the process development chemist will work in hundreds of grams to find out the types of equipment in which these new dyes may be made by the hundreds of pounds. He will study the time required for chemical reactions in large-scale production. His work will develop the methods and processes needed to bring the results of the laboratory research worker into full-scale commercial operation.

Dye making might be said to involve just one test after another. After the research chemist develops new dyes they are tested on the products to which they will ultimately be applied. They are again tested by the process development chemist and during the manufacturing process they are constantly tested and checked and finally after the dye is finished they are again tested. Then men known as colorists evaluate dyes. These experts see a color not as it should be but as it actually is. Their eyes are trained to detect minute tones and shades in colors and to recommend changes in dye mixtures as they ferret out minute deviations from standards. Their work is important in assuring the standardization of dyestuffs which, in turn, is one of the factors that has done much to give America a new supremacy in this important chemical field.

#### Position of the U. S. Dye Industry

The American dyestuff industry can now hold its own both qualitatively and quantitatively against the entire world. It has been called a giant compared to the pygmy industry we had in operation during World War I. The quality of our dyes now meets the highest standards. Our American productive capacity is ample, our research facilities are comprehensive and our dyestuff manufacturing efficiency is at a high level. We produce dyestuffs of almost all descriptions for use not only in textiles of all types but also for such industries as paper, leather, fur, paints, woodstains, plastics, ink, gasoline and film. We also produce textile auxiliaries which are used in connection with dyeing and other operations.

Of tremendous significance in this field is the fact that today the dyestuff industry is developing in this country many outstanding leaders in organic chemistry, many of whom, chemical authorities assert, are destined to take their place in pushing ahead the horizon of the American chemical industry.

#### Report On German Dyeing Available

More than a hundred new dyes, as well as many new intermediates for dye manufacture, developed by the I. G. Farbenindustrie and its subsidiaries between January, 1939, and September, 1945, have been uncovered through Quartermaster Corps investigations in Germany and Italy. The Office of the Publication Board announced recently. Virtually all research on new dyes and intermediates in Germany was conducted in the laboratories of the I. G. Farbenindustrie. In Italy, work of this type was conducted chiefly by subsidiaries of the Montecatini organization, owned jointly by I. G. Farben and Montecatini.

Included among the new products are dyes for dyeing and printing cotton, wool, rayon, nylon, and other fibers. Since expenditures for development of new dyes in the

United States amount to millions of dollars annually, information about these dyes, some of which are unknown in the United States, represents a valuable acquisition in terms of both money and time required for dye research.

Comprehensive details on the new dyes are contained in a 520-page report, No. 2461. About 440 pages of the report are devoted to dyes. The rest of the report covers the use of hydrogen peroxide for sterilization of milk. Photostat copies of the report are obtainable through O.P.B. at \$35.00 each, and microfilms at \$10.50 each.

One of the new types of dyes described in the report is the Astrazone group. Astrazones are new water soluble dyes of extreme brilliance, developed by I. G. Farben just before the war. Their fastness is said to be reasonably good, and their application characteristics excellent. They are recommended primarily for printing lustrous or matt fabrics of pure acetate rayon, though they may be applied also on mixed fabrics of acetate rayon and viscose. The present range of Astrazones comprises two shades of yellow, two shades of orange, pink, red and two shades of blue. The vat acid, vat acid padding, and continuous vat acid dyeing processes are reported to be among the most interesting developments discovered during his investigation. Some features of these methods may be of value to the U. S. cotton dyeing industry in its efforts to develop new continuous processes for dyeing cellulose fabrics with vat colors.

In the vat acid process, vat dye is reduced in the customary manner with hydrosulfite and caustic at high concentration. The resultant leuco solution then is acidified with acetic acid, and a dispersing agent is added. The leuco dye is precipitated completely in the form of highly dispersed vat acid. This is applied as in the stock-vat process, and development again is effected by addition of caustic soda and hydrosulfite. This process reportedly eliminates many of the difficulties usually encountered in applying vat dyes by the usual pigment pad-jig method. It is applied to cellulosic fibers in all forms.

The vat acid padding process involves padding of piece goods in a suspension of vat acid. Color development is effected on the jig by action of hydrosulfite and caustic soda. It is claimed that this method results in very smooth dyeings, of good color value, and offsets conservation of auxiliary agents. In the continuous vat acid process, piece goods are padded with vat acid suspension and dried. Development is carried out continuously by padding the dried, impregnated goods with caustic soda and hydrosulfite and by developing the color in a specially designed unit called an Elektrofixierer by the Germans. The Elektrofixierer, which is widely used in Europe, is a small ager in which heat is applied to fabrics by radiation, produced by electrically heated plates or coils. The aging time in such a unit is said to be much shorter than that customarily required in steam-heated vat agers. In the continuous vat acid process, development in the Elektrofixierer is accomplished in about 30 seconds at 180° C.

Report No. 2461 may be ordered in Room 1312, Department of Commerce Building, or by mail. Mail orders should be accompanied by check or money order, made payable to the Treasurer of the United States, and should be addressed to the Office of the Publication Board, Department of Commerce, Washington 25, D. C.



# textile bulletin

Published Semi-Monthly by

## CLARK PUBLISHING COMPANY

P. O. Box 1225 — CHARLOTTE 1, N. C. — Telephone 3-5586  
Offices and Plant: 218 West Morehead Street

David Clark	President and Editor
Junius M. Smith	Vice-President and Business Manager
Walter Clark	Assistant Business Manager
James T. McAden	Associate Editor
Maj. Ellis Royal (On leave in U. S. Army)	Associate Editor
Andrew Hewitt	Assistant Editor
F. R. Carey	Vice-President and Eastern Manager
(P. O. Box 133 — Providence, R. I. — Telephone Williams 3957)	

One year payable in advance	\$1.50
Other countries in Postal Union	3.00
Single copies	.10

Textile Bulletin is a member of the Audit Bureau of Circulations and the Associated Business Papers, Inc.

## Our 35th Anniversary

This issue is in celebration of the 35th Anniversary of the birth of TEXTILE BULLETIN.

Just before Christmas, 1910, David Clark found it advisable to sever his connection with a textile journal which he had edited for two years.

He had a desire and ambition to publish a textile journal but had a very small amount of cash and knew no sources from which additional funds could be secured.

He found, however, that, while editor of the other textile journal, he had acquired many friends in the textile industry and among the manufacturers and selling agents for textile machinery and supplies.

So encouraging were the offers of support that he decided to take a chance and launch a textile journal. The first issue of TEXTILE BULLETIN (then the SOUTHERN TEXTILE BULLETIN) appeared March 2, 1911.

From a small office in the Independence Building in Charlotte and with the assistance of a stenographer, who was employed upon a half-time basis, we began the publication of a weekly textile journal.

Much of the early editing was done from New York and Boston, because David Clark was not only publisher and editor but the sole solicitor of advertising, and without advertising patronage the new textile journal could not have continued in existence.

We often wonder how we dared to launch the publication and how we managed to do all the things which had to be done.

We do know that for more than two years we rarely reached the office after 6 a. m. and seldom left before 11 p. m.

We also know that but for the splendid encouragement we continued to receive from mill men and the support given us, largely on faith, by manufacturers of machinery

and supplies, we could never have come through those early days.

We had a desire to publish a textile journal which would render service to the textile industry of the South, and we knew that we had behind us support and encouragement which probably meant more than an unlimited supply of funds.

Many of the textile manufacturers and machinery and supply manufacturers, who by their support made it possible for us to establish TEXTILE BULLETIN, have passed on, but memories of their kindness lingers with us.

Many others, we are pleased to say, are still active in business and we continue to enjoy their friendship.

We would like to review the many changes which have taken place in the textile industry during the 35 years of our existence, but the minds of our readers are now upon the serious problems of the present day and we, too, are wondering about the things which are to come.

TEXTILE BULLETIN, upon its 35th anniversary, wishes to express its gratitude to the host of friends, many of whom have passed on, for the splendid support and co-operation which has made possible our continued publication.

## President (?) Truman

When Harry Truman stepped into the shoes of Franklin D. Roosevelt, he carried with him the good wishes and the hopes of an overwhelming majority of the American people, and for a while it appeared that he would "make good."

However, he surrounded himself with a group of incompetents and began weak and vacillating policies which have caused the people to think less and less of him until today he is the butt of puns and wisecracks such as "To err is Truman," "Suffering from delirium Trumans," "I'm just mild about Harry," and "Pauley-tics, just Pauley-tics."

And they are talking about a mythical sign upon the White House which says, "Don't shoot the piano player—he's doing the best he can."

If there ever was a time in which America needed a strong, forceful and upright man in the White House, it is now, but Truman has so conducted himself as to become the subject of wisecracks.

A rather startling suggestion that Harry Truman is not actually President has appeared in *The Houghton Line*, published by E. F. Houghton & Co. of Philadelphia:

Paragraph 6 of Section 1, Article II of the Constitution says:

In case of the removal of the President from office, or of his death, resignation, or inability to discharge the powers and duties of such office, *the same shall devolve on the Vice-President*, and the Congress may by law provide for the case of removal, death, resignation or inability, both of the President and the Vice-President, declaring what officer shall then act as President, and such officer shall act accordingly until his disability be removed, or a President shall be elected.

Further, under Article XII of the Amendments to the Constitution appears the following:

And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them before the fourth day of March next following, then the Vice-President shall act as President, as in case of the death or other constitutional disability of the President.

The Constitution does not say that upon the death of the President of the United States, the Vice-President shall be-



come President. It says that in such an event the "powers and duties of the office shall devolve upon the Vice-President" and that the "Vice-President shall act as President."

The first case of succession was when the elder Harrison died in 1841. Vice-President Tyler clearly believed that he was a Vice-President acting as President, not a President in constitutional terms because when he took the oath as President he explained that it was only for "greater caution."

While it is not a distinction of great moment, it does appear Harry Truman is a "Vice-President acting as President."

The matter in which the people of this country are most interested is that Harry Truman is not acting very much like the kind of President which the country needs in this great emergency.

Most historians have rated President Harding at the bottom of our list of Presidents, but if Harry Truman does not change his policies and his advisors, he is likely to crowd Harding out of that position.

## Aftermath of Two Wars

A few days ago we heard a man say that the conditions which exist today are those which follow every war.

To show how wrong he was we quote the following extracts from editorials and market reports which appeared in TEXTILE BULLETIN immediately after World War I:

From editorial of Dec. 12, 1918:

During ... period of the war there has been brought into existence a new scale of wages, but with lack of vision, the buyers of goods wait today for the collapse and the return to the pre-war schedule.

Some time, sooner or later, it will dawn upon them that the old scale of wages has gone never to return and that even though there may be some recessions, no great decline can be expected.

We have no socialistic inclinations, but in fairness to labor it must be admitted that in days prior to the war they did not in many cases receive that remuneration to which they were justly entitled.

The present scale has advanced out of proportion to the increased cost of living and there will probably be some slight adjustments but we can see no reason to expect a material decline in the near future.

The cotton manufacturer who permits his commission merchant to believe that he may soon be able to sell goods based upon pre-war wages, is doing an injury to the entire industry.

Editorial of Jan. 16, 1919:

Almost every mill manager in the South has been to New York since Jan. 1 or expects to go in the next few days.

They are nervous over the situation and have the idea that by going to New York they can get an inside tip and possibly big orders.

If there were only a few to go it would be all right but with hundreds flocking to New York and daily filling the reception rooms of the commission houses, the buyer of goods judges by their anxiety that the mill men are in need of orders and waits for lower prices.

There can be no greater bear influence than 25 per cent of the sellers of Southern cotton goods standing around the commission houses with their hats in their hands waiting for orders to be passed out.

If they would all go home and sit steady they would get business much quicker than by showing their hands in New York.

Report on cotton goods, January, 1919:

It is generally agreed that there will not be much disagreement as to what can be done about revising prices on bleached goods, as gray cloths have declined about 20 per cent from government levels. On the other hand, merchants are expressing wide differences of opinion as to what reduction can be made on colored goods at this time. It may be possible to approximate in brown

and bleached goods, the prices that prevailed the early part of last year, but even if last year's prices were granted on colored goods, it is thought to be very doubtful whether or not buyers could be induced to operate in nominal volume.

In many quarters of the market there is a strong belief that cotton goods purchases will be light for some time, no matter what the initial prices will be.

Editorial of Jan. 30, 1919:

The United States is today in the midst of a panic but it is a different kind of panic from that which we have ever faced before.

It is not a financial panic, for the banks are bulging with money and the public has plenty of money in its pocket and yet the wholesale buyers of commodities such as cotton goods, shoes, etc., are not buying because they are afraid that if they should buy, they would later find they were stocked with goods above the market and be unable to compete with those merchants who refuse to buy today.

Already a number of the largest mills have gone upon a five-day schedule and some have announced that they will run only three or four days.

Cotton goods market report Feb. 3, 1919:

Prices were weak and trading light in the gray goods division of the market. The converters say that they are afraid to move ahead and according to their explanation they are awaiting action on finished goods prices before making further contracts on unfinished goods. The jobbers are doing business now on lower and cheaper prices than for some time and they find that retailers are ready to move when they are assured that bottom prices have been reached.

Editorial of Feb. 6, 1919:

The lot of the cotton manufacturer is not a happy one at this immediate time, for every day he is filling his warehouse with goods for which there is no sale and upon which he may suffer an enormous loss if there is a further decline in either cotton or goods.

He has upon his books many high priced orders that have been cancelled, either by the government or private interest and he has been left with the high priced cotton which he had purchased for the orders that have since been cancelled.

He would like to close down his mill entirely and await the readjustment of business but he feels that he owes an obligation to his employees and is taking the risk of large losses upon the goods he is manufacturing and possibly financial failure rather than throw the operatives out of work at this time.

Report on export trade Feb. 13, 1919:

At the present moment when our merchants and manufacturers are trying to hold the market from destructive reactions, when mills are curtailing because no orders are forthcoming promptly, how are we prepared to do the one thing that will restore the wheels to action, that is, sell goods? The present striking situation is merely a temporary intensified form of what we shall see spread out over the future. With production passing consumption, the natural thing one would think, would be to find new markets. But are we doing it? Many will say "Yes, we are going after export business." But look into the matter, find out what they are really doing and what they know of how to do it, and it will quickly be found how puny are the efforts. We can make goods, we can finance them, but can we sell them?

Report on export trade March, 1919:

Since the armistice was signed the trade has had considerable anxiety through buyers, especially in India, being under the impression that prices would at once fall heavily. The cancellation of contracts was freely asked for, and hardly any new ones were forthcoming. Government work was not exhausted but, of course, it was seen that it could not last much longer. Trade meetings were held at the instance of the Manchester Chamber of Commerce, and all sections decided that they could not entertain applications for cancellations. Delivering goods, however, to a foreign buyer who does not want them at the price, is sometimes a risky business, as he may leave them at the port, refuse to pay the dues, and expose the shipper to much difficulty and expense.

The above extracts indicate that conditions in the field of cotton textiles, immediately after World War I, was diametrically opposite that of today.



**BELMONT, N. C.** — Southern Yarn and Processing Co. has received a charter authorizing it to deal in fabrics. Incorporators are Henry G. Stowe, Benjamin M. Stowe and Alfred R. Stowe, all of Belmont.

**BIRMINGHAM, ALA.** — New Era Mills, Inc., formerly Birmingham Cotton Mills, has been purchased by Palmer Mills, Inc. New Era Mills had planned to ship the 29,504 spindles and 644 looms to China for operation there, but dropped this plan recently. Officials of Palmer Mills operate Cres-Tex Mills, Inc., at Haleyville and Russellville, Ala., Fitzgerald (Ga.) Mills Corp. and Palmer Bros. Co. at Fitchville, Conn.

**RAEFORD, N. C.** — Edinburgh Cotton Mills has awarded a \$19,000 contract for construction of a one-story, 72 by 77-foot addition.

**LAURINBURG, N. C.** — Laurel Weavers, Inc., has received incorporation papers. Incorporators are Eugene A. Morgan, M. M. Roberts and W. H. Cooper, Jr.

**FERRUM, VA.** — A rayon yarn processing plant, Virginia Mills Corp., is to be erected in Ferrum at a cost of approximately \$200,000. The new mill, which will employ about 80 operatives, will prepare yarns for Angle Silk Mills at Rocky Mount, Va. Officers are J. D. Pell, president and treasurer; C. C. Lee, vice-president; and Frank L. Peak, secretary. Construction is expected to be completed by the time new machinery is delivered late this year.

**STANLEY, N. C.** — Ground has been broken for erection of a new building which is expected to double the capacity of Stanley Mills, Inc. The expansion program, when completed, will necessitate employment of 300 additional workers.

**MT. HOLLY, N. C.** — A charter amendment will provide for \$4,000,000 in preferred stock, of which \$1,500,000 is to be registered and sold, has been voted by directors of American Yarn & Processing Co. The annual report to stockholders, made by President R. S. Dickson, shows that the company has changed over its spinning plants from conventional to long draft, has obtained completely new equipment for two plants, has rebuilt two other plants, has obtained control of Dixon Mills, Inc., at Gastonia, N. C., and is erecting a new warehouse.

The company has commissioned P.O.M. Co. of New York City, an associate of Werner Textile Consultants, Inc., to furnish supply department layouts and a supply control system for the new warehouse. The P.O.M. Co. also will install sub-stores which will handle supplies for various departments of the 11 plants.

**WAYNESBORO, VA.** — Cutting and finishing operations will be discontinued at Crompton (R. I.) Co. this month and transferred to the Crompton-Shenandoah Co. at Waynesboro. The Crompton Co. also operates another Southern plant, Highlands Mills, Inc., at Griffin, Ga.

**BURLINGTON, N. C.** — Approximately \$600,000 will be spent during the next two years on an expansion program which has been announced by Copland Fabrics, Inc. Work already in progress includes the addition of 31,000 square feet to the present mill building. When the program is completed late next year the plant will be equipped with 13,448 spindles, 334 looms and appropriate auxiliary machinery for production of rayon marquisettes.

**CONESTEE, S. C.** — Blackinton Mills, Inc., manufacturer of woolen fabrics at North Adams, Mass., has purchased the old Conestee Mill property, idle since 1938. The sale includes the mill buildings and two tracts of land.

**LINCOLNTON, N. C.** — Balston Yarn Mills, Inc., has been purchased by Nathan Scheinmann and associates of New York City. Present officials of the 13,000-spindle fine combed yarn plant will be retained; in addition, Mr. Scheinmann has been named a director and chairman of the board, and David Dott, Jr., of Pawtucket, R. I., will be vice-president and treasurer.

**CULPEPPER, VA.** — Culpepper Textile Mills, Inc., has been sold by A. H. Eastmond & Co. to Lewis Carpenter of New York City, formerly connected with Southeastern Cottons, Inc. The rayon weaving plant is equipped with 632 throwing spindles and 104 looms.

**SALISBURY, N. C.** — Lariat Mills has received a charter listing Aaron Schindel and George Montgomery of New York City and W. F. McCanness of Salisbury as incorporators.

**WARRENTON, N. C.** — A majority of the outstanding stock of Peck Mfg. Co., a knitting yarn mill of 8,636 spindles, has been purchased by T. Ewing Montgomery, Philadelphia attorney representing a group of Pennsylvania knit goods manufacturing firms. Approximately \$480,000 was involved in the transaction.

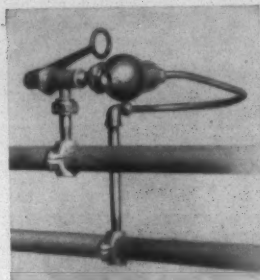
### Two Southern A.A.T.C.C. Meetings Set

The spring meeting of the Piedmont Section, American Association of Textile Chemists and Colorists, will be held April 6 at Robert E. Lee Hotel, Winston-Salem, N. C. Reservations for the banquet should be placed with Roy J. Beauregard, treasurer, Spartanburg, S. C., accompanied by \$4 for each ticket.

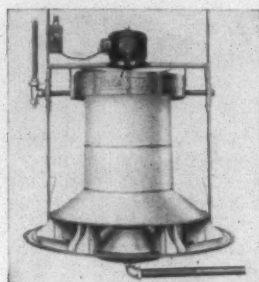
Dr. Donald H. Powers of Monsanto Chemical Co. will speak at the technical session of the Piedmont Section. Hobart Souther of Proximity Print Works, Greensboro, N. C., will lead an open forum discussion of the subject treated by Dr. Powers. Hotel reservations should be made direct with the hotel, convention headquarters.

The Southeastern Section, A.A.T.C.C., will meet April 20 at the Ralston Hotel, Columbus, Ga. Speakers will include M. T. Barnhill of Avondale Mills at Sylacauga, Ala., and Paul K. McKenney of Swift Mfg. Co., Columbus. A. Kempton Haynes, sectional chairman, will preside.

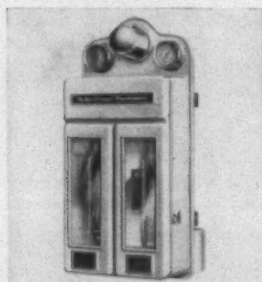




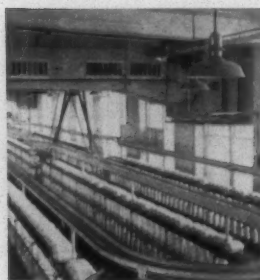
TURBOMATIC



HIGH DUTY



PSYCHROSTAT



AIRCHANGER

# Parks' Certified Climate

**I**N GEORGIA, maybe a high-posted spinning room. In Maine, perhaps a woolen card room; or in Virginia, possibly a rayon weave room. Geographical differences, mechanical differences, technical differences.

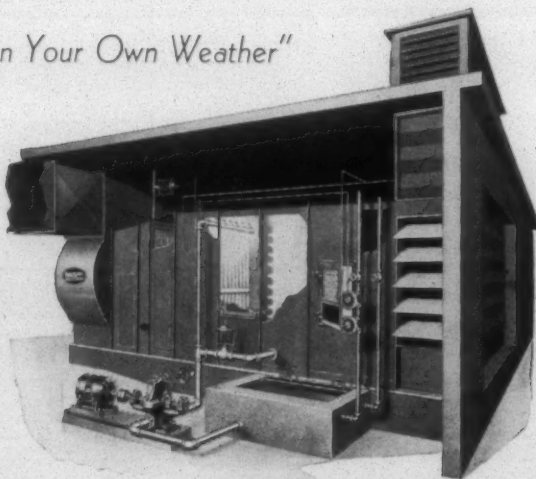
Such varied basic differences each involve a different Air Conditioning approach and treatment. It is such differences that have induced and so produced our complete line of Parks Certified Climate devices. With these to work with and the experience of the years to guide, the appropriate device is selected without bias. The results to the purchaser are more satisfactory.

## Parks-Cramer Company

Fitchburg, Mass.

Charlotte, N. C.

*"Own Your Own Weather"*



CENTRAL STATION



## PERSONAL NEWS

Robert L. Richards has been appointed assistant manager of the rayon department of E. I. du Pont de Nemours & Co., Wilmington, Del., succeeding James S. Denham, who has been assigned to the company's photo products department. Robert A. Ramsdell has been named manager of the nylon division, succeeding Mr. Richards. Mr. Ramsdell in turn has been succeeded by Charles M. Switzer as assistant manager of the nylon division.

S. Y. Austin, chairman of the board of Southern Mills, Inc., of Atlanta, Ga., and former president of Avondale Mills at Sylacauga, Ala., has been named by the War Department to head the textiles and consumer goods program for the United States occupation zone in Germany. He will go to Germany next month.

Kenneth W. Marriner, general manager of Francis Willey & Co. at Boston, Mass., has received a citation certificate from the War Department for services rendered while chief of the textiles, clothing and leather bureau of the War Production Board.

Virginia Jewel has resigned as fashion director for the Cotton-Textile Institute and the National Cotton Council to accept a position with Abraham & Straus, New York City department store. . . . Raymond Steinbach, formerly of the War Production Board, has joined the National Cotton Council staff as market economist.

Laurence R. Sherman has been appointed general sales manager of Plastic Film Corp., New York City.



**COTTON WEEK**

MAY 20-28

John C. Hughes has succeeded the late Leavell McCampbell as president of McCampbell & Co. at New York City. Mr. Hughes' former position as treasurer of the firm has been assumed by Stuart McCampbell.

Henry G. Smith has retired as vice-president and secretary of Callaway Mills at LaGrange, Ga., after serving the company since 1914. He will continue as a director. A. W. Gunn, formerly an assistant vice-president, has been elected secretary.

Roddy A. Field has succeeded Clarkson Jones as general manager and treasurer of Rhodhiss (N. C.) Cotton Mills Co. The plant is now part of the Pacific Mills organization.

J. F. Cline, formerly overseer of spinning at the Oakland Plant of the Kendall Co. at Newberry, S. C., has become associated with the Greenville, S. C., office of Armstrong Cork Co. He will represent the textile department of Armstrong's industrial division in sections of South Carolina and western North Carolina.

Charles C. Withington of Greenville, S. C., has been named South Carolina representative for Kearny (N. J.) Mfg. Co., Inc.

Laurence C. Holt, associated with the textile industry for 17 years, has been appointed chief of the newly organized synthetic waste division of Railway Supply & Mfg. Co., Cincinnati, Ohio. He will develop a research program which is to include procurement, adaptation of synthetic fiber waste to the best end-uses and a study of the practical problems involved.

Robert L. Williams has resigned from Virginia Mills, Inc., at Swepsonville, N. C., to become first shift second hand in the spinning department of Celanese Lanese Corp. at Burlington, N. C.

Luther H. Hodges, vice-president of the manufacturing division of Marshall Field & Co., has been nominated for the presidency of the Rotary Club of New York City.

Robert A. McCraney has resigned as superintendent of Chadwick-Hoskins Co. Plant No. 4 at Charlotte to become superintendent of Morgan Cotton Mills, Quitman, Ga.

M. L. Church has resigned as Southern representative for Catlin Yarn Co. in order to set up his own yarn brokerage at 1011 Commercial Bank Building, Charlotte.

Thurmond Chatham, chairman of the board of directors of Chatham Mfg. Co. at Elkin, N. C., has announced his candidacy for congressman from the fifth district of North Carolina.

Bruce C. Baker, manager of the Springs Cotton Mills plants at Chester, S. C., has resigned. Conway L. Still has been named to fill the position temporarily. Mr. Still's regular post is that of assistant to E. Lee Skipper, vice-president and general manager of the Springs chain.

**BACK TO CIVILIAN LIFE:** Forrest M. Davidson, Jr., formerly assistant superintendent of Minneola Mfg. Co. at Gibsonville, N. C., has been released from the Navy following four years of service. . . . Albert L. Butler, Jr., released from the Army, has been elected head of the board of directors of Arista Mills Co. at Winston-Salem, N. C. . . . Benjamin P. Anderson, on leave from Riverside & Dan River Cotton Mills, Inc., during 3½ years of Army service, currently is chief of the cotton section, cotton and synthetic textiles branch of the Civilian Production Administration. . . . William B. Hagenah, released from the Marine Corps, has been appointed Southern representative for Iselin-Jefferson Co. with headquarters at Atlanta, Ga. . . . Harry Green, an Army veteran of five years, has joined Arnold, Hoffman & Co., Inc., as representative in Georgia with headquarters at Columbus. . . .



James J. Casserly (left), lately of the Army's Chemical Warfare Service, has joined the textile finishes division of Sylva Industrial Corp. . . . W. L. Morgan has resumed his sales duties with the textile division of Dayton Rubber Mfg. Co., covering the South Carolina territory. . . . P. O. Stribling, Jr., has been released from active duty with the Army and has resumed duties as sales representative for Detroit Stoker Co., with headquarters at Greensboro, N. C. . . . John J. Owen, formerly of Army Ordnance, has joined the staff of the Institute of Textile Technology at Charlottesville, Va., for research work in textile machinery and design. . . . Dr. William T. Ham, Jr., recently released from the Marine Corps and formerly a research physicist for the Kendall Co. at Paw Creek, N. C., has been appointed to the I. T. T. research staff. . . . A number of former military men have returned to executive duties with the man-



# Houghton Wool Tops

PROMPT SHIPMENT ALL GRADES ON SHORT NOTICE

SUITABLE FOR BLENDS WITH RAYON OR COTTON

Write or Phone Our  
Sou. Representative  
JAMES E. TAYLOR  
Telephone 3-3692  
CHARLOTTE, N. C.

**HOUGHTON**  
WOOL COMPANY  
253 SUMMER STREET ★ BOSTON

## HEADQUARTERS

FOR

SIZING • PENETRANTS

SOFTENERS • ALKALIES

SHUTTLE DRESSING

"TWIST-SETTER" MACHINES

**SEYDEL-WOOLLEY & CO.**

TEXTILE CHEMICALS  
748 RICE STREET • ATLANTA, GA.



## 80 YEARS

*of service to the*

## TEXTILE INDUSTRY

We have supplied starches, gums and dextrines to the Textile Industry since 1866.

This long experience helped to give us the know-how in solving many war-time sizing, finishing and printing problems, and in meeting critical shortages by developing satisfactory substitutes.

Call on us for help in solving your postwar problems. Our Textile Laboratories and Field Staff are at your service.



285 Madison Avenue  
1011 Johnston Bldg.

New York 17, N. Y.  
Charlotte 2, N. C.

## How Do Your Shipments Run the Gauntlet of Rough Handling?

Guard Against  
These Shipping  
Hazards



ROUGH  
HANDLING



DUST

**Fibreen**  
REINFORCED PAPER



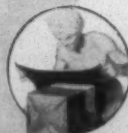
DIRT



HIGH  
PACKAGING  
COSTS



MOISTURE



PRODUCERS of textiles particularly, realize how necessary is the strong, tough, tight shipping package.

HENLEY has it!

And HENLEY representatives have studied so closely the requirements for safe shipment of textile products, you are equally safe when a HENLEY man gives you package engineering recommendations.

But every application is an individual problem. It can be properly solved only by sincere study. Yet, manufacturers who have used Fibreen re-inforced paper have found it so astonishingly economical and successful, very likely it can be equally useful to you.

You will enjoy prompt and interested service from any of our offices:

HIGH POINT, N. C.

GASTONIA, N. C.

CHARLOTTE, N. C.

Southern Paper Products Co.,  
Division  
ASHEVILLE, N. C.

Please address first inquiries to  
the HIGH POINT main office

**HENLEY**

Formerly —  
PARKER PAPER CO.





ufacturing division of Marshall Field & Co., according to an announcement by J. O. Thomas, personnel manager at Spray, N. C., and himself a veteran of two wars. Joseph G. Farrell and John T. Latham have rejoined the engineering department at Spray, David E. Simons, Jr., has returned to the wage bureau at Spray, and Richard C. Tanner is back with the research and quality control department, also at Spray. Daily Paul Gambill, John M. Harkey and Cecil Squires have returned to duties at the blanket mill, Draper, N. C., and Ralph C. Going has resumed his position at the sheeting mill, also located at Draper. Neil M. Dalrymple and James M. Rimmer have returned to the company's towel mill at Fieldale, Va.

William J. McGeough and Wesley G. Carlson have been elected directors of U S Bobbin & Shuttle Co. at Providence, R. I. Mr. McGeough has been associated with the company since 1901 and currently is general manager and assistant treasurer in charge of all manufacturing operations. Mr. Carlson has been with the firm since 1915, is its secretary and also clerk of the board of directors.

Otto Pratt, South Carolina representative for National Ring Traveler Co., is recovering from a serious illness and expects to resume his duties in the near future. He has been a patient at Memorial Hospital in Charlotte for several weeks.

J. Hugh Bolton has been elected president of Whitin Machine Works at Whitinsville, Mass., succeeding E. Kent Swift, who has been named chairman of the board of directors. Mr. Bolton retains the office of treasurer, a post he has held for some time.

C. G. Davis, formerly associated with Consolidated Textile Corp. at Lynchburg, Va., is now overseer of carding and spinning for Virginia Mfg. Co. at Fork Shoals, S. C.

Alfred F. Lichtenstein has been elected chairman of the board of directors of the Ciba Co., Inc., New York City, following the resignation of Frank B. Common of Montreal, Canada. Harry B. Marshall has been named president of the company, and

S. I. Parker and J. P. Bauer have been appointed vice-presidents.

Frank G. Moore, traffic manager for Southern Alkali Corp. and the Columbia Chemical Division of Pittsburgh Plate Glass Co., has been elected chairman of the traffic committee of the Manufacturing Chemists Association. . . . William F. Newton has been appointed manager of research and development for the Columbia Chemical Division.

Stein, Hall & Co., Inc., of New York City has announced the resignation, effective June 30, of Dr. Alexander Frieden, vice-president and director of its technical division. J. Rex Adams, manager of the development department, will be acting manager of the technical division. . . . Oliver H. Clapp, vice-president in charge of the company's sales division, has been elected a director, Robert Strasser has been appointed assistant sales manager and Harold M. Johnston is now manager of the starch products department.

Alfred Driscoll, for the past five years chief chemist for Celludye Corp., has joined Dexter Chemical Corp. in New York City as a member of the research staff of its textile chemical division.

L. Carroll Atkisson of Textile Specialty Co. at Greensboro, N. C., has been appointed to an advisory committee of 27 representatives from all sections of the country to study the structure of the American Red Cross organization and make appropriate recommendations. Mr. Atkisson has been chairman of the Greensboro Red Cross chapter for the past five years.

J. F. Tholl has been elected president of American Tool & Machine Co. at Hyde Park, Mass., producer of extractors and vacuum machines for the textile industry. He succeeds C. I. Day, who becomes chairman of the board. Mr. Tholl has been general manager for the past 15 years.

Harry E. Smith, vice-president of Raybestos-Manhattan, Inc., at Passaic, N. J., has been placed in charge of sales and marketing for the company's Manhattan Rubber Division.

Sir Samuel A. Salvage has resigned as chairman of the Rayon Producers Group of New York City. He has been succeeded by S. R. Fuller, Jr., president of American Bemberg Corp. and North American Rayon Corp. Ashton M. Tenney, president of A. M. Tenney Associates, has been named treasurer of the group.

## OBITUARY

**Walter Guerry Green**, 77, president of Glencoe Mills at Burlington, N. C., died recently at his home in Charleston, S. C., following a short illness. He is survived by his widow, two sons and two daughters.

**Laurence May**, 51, head of the chemical and dye departments in the Chicago, Ill., plant of Sherwin-Williams Co., died recently. He had been associated with the company 30 years.

**Joseph B. Burgard**, 84, founder of the old Greenville (S. C.) Cotton Mills Co. and formerly associated with Camperdown Co., Inc., died recently at Greenville. He had retired from active work last year.

**Harold Ivens**, 49, Southern representative for Turner Halsey Co. for the past four years, died recently. Funeral services were held at New Orleans, La.

**Lieut. Charles A. Cannon, Jr.**, 26, son of the president of Cannon Mills Co. at Kannapolis, N. C., has been declared dead by the War Department. He has been listed as missing in action since his plane was lost over Burma last year. Survivors, besides his father and mother, include his wife and a young son.

**Maj. Nicholas D. Carpenter**, a chemist for Union Bleachery at Greenville, S. C., before entering the Army, has been declared dead by the War Department. He had been listed as missing in action.

**Albert L. Scott**, 67, president of Lockwood Greene Engineers, Inc., of New York City, and widely known in the textile industry, died March 2 at his home at Chappaqua, N. Y. He is survived by his widow, a daughter and four sons.

## For the Textile Industry's Use

### EQUIPMENT — SUPPLIES — LITERATURE

#### Slaughter Machinery To Distribute Venango Items

Slaughter Machinery Co. of Charlotte has been appointed Southern representative for the package, rawstock and skein dyeing machinery manufactured by Venango Engineering Co. of Philadelphia. Edwin F. Slaughter, who recently was discharged from the Army Air Forces after three years of service,

will be in charge of sales of Venango equipment as well as the equipment manufactured by Mount Hope Machinery Co., which includes guiders, expanders and cloth handling machinery.

#### United States Testing Co. Repeats Summer Course

The refresher course in textiles and testing techniques held yearly in the

main laboratories of United States Testing Co., Inc., at Hoboken, N. J., will be repeated this summer. These courses, held over a period of nine years, are planned to bring up to date and expand textile studies.

Students receive specific instructions in fiber, fabric and cloth analysis; the origin, identification and nature of natural and man-made fibers such as rayons, casein, vinyon, nylon and fiber-



---

## Humidity Control

FOR YOUR PRODUCT

## Evaporative Cooling

FOR YOUR EMPLOYEES

## Ventilating—Heating

---

### EQUIPMENT SOLD—OR LEASED

---

STEAMMAIRE EQUIPMENT IS HUMIDIFYING AND COOLING 500 MILLION CUBIC FEET OF AIR PER HOUR IN THE LEADING INDUSTRIAL PLANTS OF AMERICA.

- Industrial Air Conditioning Equipment.
- Electric Fired Boilers—for heating room air—for heating water or liquids—for drying products.
- Motorless Pumps—for water, condensate return, or other liquids—no moving parts.

Equipment For:

- Yarn Conditioning
- Cloth Conditioning

- PAPER CONDITIONING

For Moisture Content, Embossing, or Finish

## STEAMMAIRE COMPANY

Patentees and Manufacturers



### ESTIMATING AND SERVICE

Cincinnati, Ohio (Main Office)—New York, N. Y.—Charlotte, N. C.—Providence, R. I.—Atlanta, Ga.—Chicago, Ill.—Greenville, S. C.  
Toronto, Canada—Boston, Mass.—Bombay, India (T. Maneklal Mfg. Co.)



glas; the testing of woven and knit fabrics for thread count, fiber identification and composition, tensile strength, seam slippage, color fastness to light, washing and dry cleaning. Newly developed equipment, such as the yarn shift, warmth, snag, fatigue and friction testers, weather-ometer, fluorophoto-meter, coolness tester, and osmoscope are important parts of the course. Sample swatches of fibers, yarns and fabrics, mimeographed text and special literature are distributed to each student. Emphasis is placed on familiarizing students with A.S.T.M., United States Government, commercial standards and other specifications. The scope of service tests and their interpretation and use by industry and the consumer is touched upon. Field trips to nearby industrial plants, a synthetic fiber plant and a textile finishing mill are included in the program.

Classes will be in session from 9 a. m. to 4 p. m. beginning July 8 and extending through July 26. A small fee is charged to cover the cost of supplies, mimeographed text and samples necessary for the students laboratory work. The group is limited in number so that each member may have the ad-

vantage of individual instruction and the opportunity to work with testing equipment. Applicants are required to have some elementary textile training in order that a major portion of the three weeks may be devoted to intensified study. Application forms may be secured by writing to the company's main laboratories at Hoboken.

### Veeder-Root, Inc., Develops New Non-overthrow Wheel

A non-overthrow plastic wheel, which has a reset pawl containing a pin protruding in such a manner that it will engage with a notched plate in the 20-tooth gear section of the pick, hank and yardage counters of the 2-3 type, has been developed by Veeder-Root, Inc. The function of this new product is further described by its manufacturer as follows: As the pawl drops into the spline in the reset shaft, the pin disengages, permitting the wheel to be reset and to turn independently of the 20-tooth gear. When the reset shaft has been locked in position, the wheel resists overthrowing except when driven by the 20-tooth gear. This is caused by the locking action of the pin in the pawl with the notched plates on the 20-tooth gear. This locking action takes place immediately as the wheel advances, and causes the pawl to rise from the reset shaft spline, forcing the pin to engage the notched plate and making the two halves of the wheel move as one.

### Mill Converted Into Machinery Warehouse

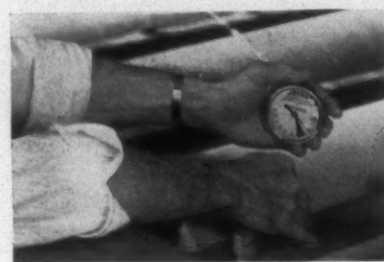
Whitney (S. C.) Mills, Inc., near Spartanburg, S. C., purchased before the war by Crescent Corp. of Fall River, Mass., and sold to Walter Montgomery of Spartanburg, who operated it during the war in the production of sheeting, has been repurchased by Crescent and has been converted into "the South's largest department store for new and used textile machinery." James A. Connell of Charlotte, N. C., who has represented Crescent in the South for many years, will be in charge of the Spartanburg plant.

The converted building has 275,000 square feet of floor space. In one section, belting will be manufactured and rolls re-covered. In another, used machinery and parts, purchased throughout the South, will be reconditioned. A large portion of the floor space has

been converted into modern display rooms where both new and reconditioned textile machinery and equipment will be displayed for the textile trade.

### New Pressure-Pull Indicator Product Of Rosales Co.

A new and improved model of the widely-used Joyro Pressure-Pull Indicator for accurately determining roller pressure-pull is now available from the George Rosales Co., Los Angeles, Cal. Reportedly the only indicator of its kind on the market, it consists of a flat, watch spring steel strip connected to a special tensionometer with a reading dial (see cut). It is extremely



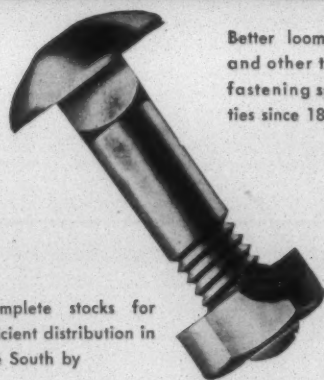
simple to operate and can be a controlling factor for quality in any operation using rollers.

Widely used before the war, the new Joyro Pressure-Pull Indicator is finding new fields of application in textiles and many other industries using rollers in their production processes. The indicator can be used to check pressure-pull across the entire length of a set of rollers by taking different readings at regularly spaced intervals.

### Two Dyeing Machinery Concerns Consolidated

Klauder Weldon Giles Machine Co. announces the merger of the Giles Dyeing Machinery Co. and the Klauder Weldon Dyeing Machine business recently purchased from the H. W. Butterworth & Sons Co., Philadelphia, Pa., by Wm. E. H. Bell, former manager of the Butterworth dyeing machine division. Mr. Bell was vice-president and general manager of Klauder Weldon Machine Co. prior to its acquisition by Butterworth. These two lines of dye house equipment, scouring, bleaching and dyeing machines will be manufactured at Adams Avenue and Leiper Street, Philadelphia 24, Pa. The personnel will include Mr. Bell and all of those previously associated with the Giles firm.

### HEAT TREATED LOOM BOLTS for greater durability



Better loom bolts and other textile fastening specialties since 1886.

Complete stocks for efficient distribution in the South by

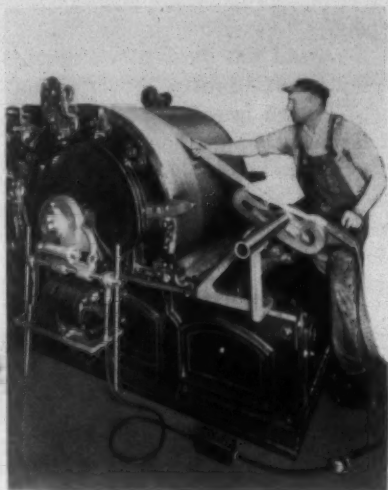
INDUSTRIAL SUPPLY COMPANY  
Clinton, South Carolina

**PAWTUCKET**  
MANUFACTURING COMPANY



## Howard Bros. Introduces New Tension Regulator

The Tuffer Tension Regulator, a new device for regulating and maintaining tension while drawing on Card Clothing, has been brought out by Howard Bros. Mfg. Co. of Worcester, Mass.



This new device (see cut), which applies the clothing with tension absolutely even, operates on either woolen or cotton cards and may be set for any tension required. The tension is indicated on a graduated scale and held constant by an adjustable plate. Woolen cards may be clothed without separating the cards.

Advantages of the Tuffer Regulator are described as (1) easily handled and installed by one man, as it weighs only 62 pounds; (2) no special skill required to apply the Regulator; (3) no delicate parts to get out of adjustment; (4) saving of time on first grind; (5) it may be operated by a hand winch or the Tuffer Motor Drive. Using the Tuffer Motor Drive, it is possible for a carder and one helper to clothe a cylinder in just a short time. The drive includes all equipment necessary to operate on all makes of cards and special attachments permit it to be used on other reclothing devices.

## Free-Wheeling Expander Offered By Mount Hope

Mount Hope Machinery Co. of 42 Adams Street, Taunton, Mass., had planned to exhibit at Greenville its new patented Free-Wheeling Expander. This item is described as turning so easily that a single expander will protect nips from creases and insure

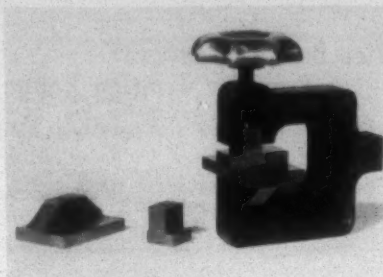
smoothly batched-up rolls on all types of sheets from thin plastic film to duck. When maximum sidewise stretch is desired, up to nine expanders in three sets of three each have been used on fabric as light as marquisette, the firm states. Other Mount Hope items which would have been shown are the patented tilting roll weft straightener, the continuous roll feed and the swing guider.

## New Items Developed By Scott Testers, Inc.

Scott Testers, Inc., of Providence, R. I., had planned to present at the Greenville show the new development of constant rate of load drive as applied to the conventional pendulum type of textile tester. This new drive, developed in co-operation with the Schenectady laboratory of the General Electric Co., electrically increases or decreases the speed of the driven clamp to eliminate from the upper clamp or loading end of the tester the effect of stretch in the sample. The new electronic drive is actuated by a control attached to the loading head of the tester which varies the speed of the pulling clamp of the tester so as

to cause a uniform motion of the pendulum and therefore uniform rate of load upon the specimen. The new drive is so designed that by a small switch the tester is immediately changed over and operated in accordance with the existing conventional specified conditions.

Another feature being introduced by the company is a newly developed



fabric clamp (see cut). This was designed to accommodate the need brought about by the introduction of the synthetic yarn fabrics during the war. Considerable difficulty was experienced in successfully gripping these fabrics so that slippage during the test would not cause a premature break. The new clamps, holding more firmly at the front edge than in the

# VICTOR MILL STARCH

## *Always A Winner!*

Distributed by

**CLAUDE B. ILER**  
Southern Manager  
Greenville, South Carolina

**F. M. WALLACE**  
Birmingham 9, Alabama

**L. J. CASTILE**  
Charlotte 3, North Carolina

**C. C. SWITZER**  
Greenville, South Carolina

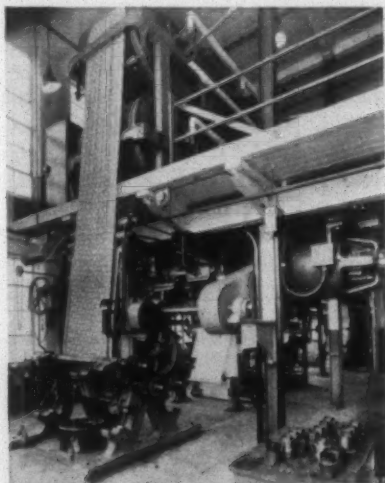
**THE KEEVER  
STARCH CO.**  
Columbus 15, Ohio



rear, grip the fabric in such a way as to minimize the slippage, thereby obtaining more correct value of the material and more accurate elongation readings. Extensive tests made on conventional cotton duck prove that increases in tensile strength of up to ten per cent may be experienced from the use of the new clamps over results from the same material tested on standard clamps.

### Rice Barton Produces Precision Printing Range

A new high-precision printing machine range, produced by Rice Barton Corp. of Worcester, Mass., would have been promoted at the Greenville show had it been held this year. The range (see cut) is said to be new in every



respect, retaining only the original fundamental principle of the rotary textile printing machine — a central cylinder around which the engraved rollers are placed radially. Rice Barton states that the machine assures increased speed and production, low percentage of seconds and savings in horsepower, color and maintenance. Continuous feeding of goods, together with manually set and automatically maintained tension control, are described as contributing factors to higher production.

### New Twist-Setter Machine Is Seydel-Woolley Item

The Niagara Twist-Setter, a product of Seydel-Woolley & Co., Atlanta, Ga., which was to have been exhibited at the Southern Textile Exposition, is described by its manufacturer as a machine embodying a revolutionary new principle for conditioning yarn. Since

its introduction to the trade at the 1941 exposition, many improvements have been made in its design to further reduce maintenance costs, principally effected by the use of stainless steel and monel metal in its construction and by its simplicity of design, eliminating the use of aprons and other moving parts. By the use of a series of baffles and two banks of spray nozzles, the yarn is sprayed from all sides, affording maximum uniformity.

Other products featured by Seydel-Woolley include Seycowax, a product used in Seyco sizing compounds for many years, and Seyco No. 16, devised for use in South America with yuca or tapioca starch. It is described as a versatile one-piece compound especially suitable where warps do not require Seyco binding compounds. The firm also manufactures Seyco special sizing compounds made to suit various irregular and special conditions encountered at some mills, and new yarn conditioning penetrants of the Seyco No. 7 series, adaptable to various difficult water conditions. New finishing penetrants and dispersing agents also are being introduced as the Seyco No. 8 series.

### New, Improved Ahco Products Are Offered

In the past five years, the Arnold, Hoffman & Co., Inc., has made rapid and outstanding progress in developing new products and improving others for the advancement of various processes for the textile industry. Some of these to which attention is particularly drawn are the complete line of Ahcovels, Ahcowets, Ahcobond S and Syntharols. The long line of other textile detergents and finishes have not been neglected in the effort to improve same to expedite and improve textile processes. Ahcovel A, E, F, G and R, as well as Resynon SL, are all substantive softening agents, designed to meet and accomplish desired results. It is believed that a semi-permanent softness may be obtained on a very wide range of fabrics by the use of one of these Ahcovels. With adequate description of the results desired, expert advice will be rendered for any individual condition. Ahcovels are so designed as to provide semi-permanent softness, eliminate browning under heat, and maintain color shades.

The series of Ahcowets—RS, ANS, LMA and RL-199—were produced to meet exacting conditions as detergents,

wetting agents, rewetting agents and dyeing assistants. Technical details are available for individual problems.

Ahcobond S is a synthetic resin with high bonding properties and is an excellent plasticizer for gelatines, proteins, as well as starch. The use of Ahcobond S has very rapidly increased within the past five years and other fields of application are rapidly developing.

Syntharol was the first concentrated one-piece sizing material ever produced. Through recent years, by research and practical application, Syntharol has been improved as a plasticizer for starch, in sizing all counts of cotton warps. Technical service on the application of Syntharol is available to all textile mills.

Other resins are being produced by the Arnold, Hoffman company for textile finishing, which will be thoroughly explained to the industry when raw materials become sufficiently available to meet all demands. Concentral, one of the outstanding tallow softeners, has been much improved in recent months and is being used on both cotton and rayon fabrics for finishing. A new series of throwing oils will be available as soon as raw materials in sufficient quantities may be purchased.

### Brown Gives Emphasis To Four Instruments

Increasing recognition in the textile industry of the importance of instrumentation for recording, indicating and controlling processes and systems was to have been reflected in the Southern Textile Exposition exhibit of the Brown Instrument Co., Philadelphia, and its parent company, Minneapolis-Honeywell Regulator Co. Four instruments, chosen from a large group applicable to textile processes and manufacturing, currently are being emphasized by Brown.

The Moist-o-Graph is an instrument which measures and controls yarn regain as warp passes to the slashed beam. The control permits production of a warp that contains the correct moisture content to meet specific weave room requirements. The Moist-o-Graph makes use of a simple resistance measuring circuit, calibrated in terms of moisture content, enabling the operator to set the instrument for the desired regain. Accuracy is unaffected by the number of ends or size of the yarn. In peacetime, a metal detector roll



Developed to meet military needs—  
Now available to the Textile Industry

## Super-Chrome Plating

AN EXTRA HARD CHROMIUM PLATING  
FOR FLYERS, TWISTER ROLLERS  
SPINNING and TWISTER RINGS, Etc.

Prevents rust and corrosion; reduces friction and thus insures much longer wear.

ALSO CADMIUM AND ZINC PLATING

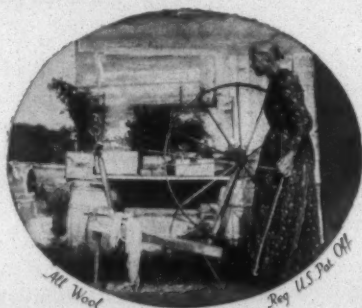
We repair and balance flyers  
as well as plate them.

Full details on request without any obligation—Write today

## SIMMONS PLATING WORKS

219 Prior St., S. W.

Atlanta 3, Ga.



## KNOXALL

ROLLER, SLASHER AND CLEARER CLOTH  
SANFORIZING BLANKETS  
SLASHER JACKETS  
ENDLESS REVOLVING CLEARERS

## EDWARD H. BEST & CO.

EST. 1888 BOSTON, MASS. INC. 1901  
ATLANTA, GA. NEW YORK

W. C. HAMES 185 Pinecrest Ave., Decatur, Ga. Dearborn 5974  
H. W. CURTIS 735 W. Crescent Ave., Allendale, N. J. Allendale 3521

GREENVILLE, S. C.

RALPH GOSSETT—WILLIAM J. MOORE  
15 Augusta Street, Telephone 150

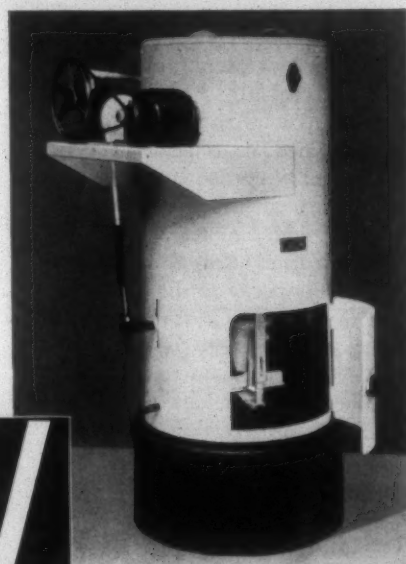
*Now*

YOU CAN SAVE  
"HYDRO" AND

\$ \$ \$ \$

WITH THE

"HYDROMISER"



Progressive finishers who are using this new VIRGINIA "extra" report a 10 to 15 percent Hydro saving and a significant reduction of rejects in continuous dye operation. The HYDROMISER automatically feeds Sodium Hydrosulphite to the dye bath, insuring uniformity through accurately controlled flow—1 pound to 200 pounds per hour. If your dye process is continuous, you should investigate. Mail the coupon for complete details on the HYDROMISER.

## VIRGINIA

SMELTING COMPANY

WEST NORFOLK, VIRGINIA

NEW YORK • PHILADELPHIA • BOSTON  
CHARLOTTE • DETROIT

Virginia Smelting Co.,  
West Norfolk, Va.

Gentlemen:

Please send information on saving Sodium Hydrosulfite with the HYDROMISER.

Name \_\_\_\_\_ Position \_\_\_\_\_  
Company \_\_\_\_\_  
City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_



rides on the slasher take-off roll and provides the contact through which a minute electrical current passes. A recording instrument, calibrated in terms of regain, is connected to the roll. The Moist-o-Graph chart instantaneously and continuously records warp moisture content. The scale is visible to a distance of 50 feet. In addition, the Moist-o-Graph speeds or slows the slasher to keep warp moisture at any desired point. The set point is adjustable, so that regain may be maintained at any required level.

The Time Pattern Transmitter and Receiver is a dual instrument set-up for size cooking and storage control systems. It has been developed to meet special requirements of those mills whose size cooking schedules demand maximum accuracy and whose patterns must be varied at frequent intervals. The transmitter portion functions on a rotating cam, cut to a predetermined pattern of time and temperature. As the cam rotates the cam follower pneumatically positions the control index of the receiving instrument which regulates air pressure to the steam control valve. A continuous record of actual temperature variations of the batch is made by the receiving instrument, in contact with the solution, by means of a connection with a temperature sensitive bulb in the cooker.

The Brown Continuous Balance ElectroniK Indicating and Recording Potentiometer Controller, widely used in other industries where accurate and sensitive control is a must, is being featured by the Brown company in connection with current and proposed continuous bleach systems. This controller is said by the industry to be ideally suited to meet the requirements of the new continuous bleach process. Its instant response meets the demand for control action as fast as speed of the cloth.

The Thermometer-Hygrometer is said to meet the growing recognition that humidity control is a vital factor in textile mill operation. The Thermometer-Hygrometer measures and records on a single chart a continuous record of these factors.

### **Textilis Oils Developed For Industry By Shell**

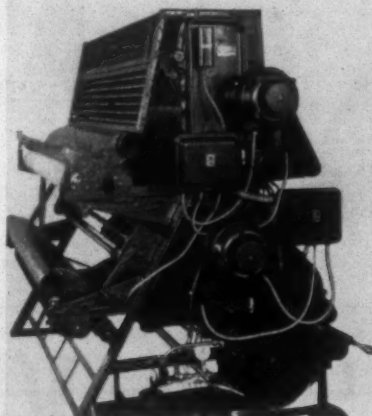
Its complete line of anti-rust and non-foaming Textilis Oils, which have been developed specifically for machinery employed in the textile industry, was to have been exhibited by Shell

Oil Co., Inc., at the Southern Textile Exposition. Shell's Textilis Oils are described as unique in that the rust inhibitors added do not adversely affect the other desirable characteristics of the oils, including oxidation stability, demulsibility, high film strength, freedom from lacquer formation and low volatility.

The rust preventive quality added to the Shell Textilis Oils by a special refining process reportedly results in higher polarity and affinity for metal. Tests which evaluate the performance of rust preventive lubricants and oil foaming tests have been applied to the Shell line with successful results.

### **New Shear Developed By Hermas Machine Co.**

The Model AV shear, described as a radical departure from all previous designs, was to have been shown at the Southern Textile Exposition by Hermas Machine Co., Inc., of Hawthorne, N. J. The machine (see cut) is of vertical design with four knives, one directly above the other. Among new features attributed to this machine are: self-lubricating arrangement for the revolving knives and ledger blades; protec-



tion of seams by automatic stoppage of revolving knives as a seam approaches; especially designed hoods which insure an even suction throughout the entire length of the cutting unit and directed at a point where the cutting takes place, allowing all hanging threads to be drawn into the knives and sheared close to the fabric. The shear is available in all standard widths. Other Hermas items which would have been exhibited are the Model DC2 sewing and rolling machine, the Model GT tubing machine and the Model GC30 winding and measuring machine.

### **Houghton Is Promoting New Textile Compounds**

The definite swing from the use of oils and soaps to chemically conceived compounds for use in many forms of textile processing was to have been the theme in the exhibit of E. F. Houghton & Co. at the Southern Textile Exposition. During the war years, the research department of E. F. Houghton & Co. was increased materially both in manpower and physical facilities. A sizable addition was built to the company's laboratory and basic research was begun several years ago along several lines, including detergents, wetting agents, softening oils, finishing materials and warp sizes for synthetic fibers. Much of the underlying work was finished before the end of the war and it then became a problem of obtaining critical materials which had to wait until war demands ceased, also increasing manufacturing facilities and equipment to enable mass production of these new chemical compounds. The latter has been assured by the recent purchase of a five-story fireproof addition to Houghton's plant in Philadelphia.

### **Ideal Machine Develops New Type Drawing Rolls**

Patents covering a new type of metallic drawing rolls, described by its manufacturer, Ideal Machine Shops of Bessemer City, N. C., as revolutionary, have been applied for. According to Ideal Shops, the new rolls have ball or roller bearings instead of solid collars and necks. The outer races of the bearings stand still and serve as spacers to hold the top and bottom rolls apart the correct distance to allow for the proper meshing of the flutes. The inner races are secured to the rolls, allowing the drawing rolls to turn freely upon the balls or rollers contained in grease-packed and fully-enclosed bearings.

In this method there are no exposed bearing surfaces to dry out or catch grit and lint. It eliminates the sleeves on the top rolls, the solid spacing collars which wear excessively and unevenly, and the long bottom roll necks which cause great friction and loss of power by being heavily weighted down in open stands. It places the burden of supporting the weights upon the outer races of the bearings instead of upon the bottom rolls as heretofore. This fact allows the rolls to turn free of any



## John Hetherington & Sons, Inc.

72 LINCOLN STREET BOSTON 11, MASS.

Southern Representative  
THOMAS M. BROCKMAN, JR.  
236 West Airline Ave., Gastonia, N. C.

*Sole Agents for*

JOHN HETHERINGTON & SONS, Ltd.  
MANCHESTER, ENGLAND  
NASMITH COMBERS

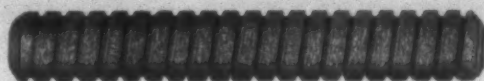
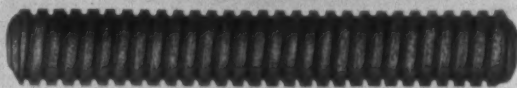
•  
DRONSFIELD BROS., Ltd.  
OLDHAM, ENGLAND

CARD GRINDING & ROLLER COVERING MACHINERY

*We Stock*

COMBER NEEDLES—ATLAS BRAND EMERY FILLETING—  
ROLLER VARNISH—TRAVERSE AND DRUM GRINDERS—  
CARD CHAINS—HANK INDICATORS—CLEARER CLOTH  
—SPRINGS—SPROCKETS—TEXTILE MACHINERY REPAIR  
PARTS

## TEMPLE ROLLS OF ACCOTEX



Six Accotex Compositions to Choose From

**ROY NOBLE**

P. O. Box 137 • New Bedford, Mass.

JOHN P. BATSON—BOX 841, GREENVILLE, S. C.  
Southern Sales Agent

## STAINLESS STEEL

**"Everything In Stainless Including the Kitchen Sink"**

For Your Convenience,  
Contact Our Southern  
District Manager,  
MR. FRANK F. ROSE,  
City Savings Bank Bldg.,  
Charlotte, North Carolina.  
Telephone: Charlotte 8989.

Available for Immediate Shipment from Complete Warehouse Stocks  
as needed for the fabrication and maintenance of all types of  
dyeing and finishing equipment.

Sheets, Plates, Bars, Angles, Wire, Castings, Tubing and Pipe, In Various Analyses

### OTHER STEEL AND ALLIED PRODUCTS

ALLOY STEEL BARS  
BRASS AND BRONZE RODS  
COLD FINISHED STEEL BARS  
COLD ROLLED FLAT WIRE  
DIAMOND "E" SPRING STEEL  
PERFORATED METALS

HOT AND COLD ROLLED SHEETS  
COLD ROLLED STRIP STEEL  
TOOL STEELS—DRILL ROD  
WELDING ELECTRODES AND ACCESSORIES  
WIRE—MUSIC, SPRING AND BASIC  
SPECIALTIES



**EDGCOMB STEEL** *Company*

General Office and Warehouse

D Street below Erie Ave. PHILADELPHIA 34, PA. Tel. NEBraska 6300

Southern District Sales Office

City Savings Bank Bldg. CHARLOTTE 2, N. C. Tel. Charlotte 8989



hold-down or hold-back tension except that which is necessary to draft the fibers.

Other services offered by Ideal Machine Shops include application of RCK finish and repair of flyers, rebuilding of roving, spinning and twisting spindles, and reclamation of textile mill parts by metallizing. Equipment has been ordered and is being set up for the manufacture of flyer pressers. The company expects to be able to deliver all sizes of new pressers within a few months.

### New Hygrolit Conditioners Are Announced By Kearny

Hygrolit yarn conditioning machines, Models 11AY and 14AY, and Hygrolit cloth conditioning machine, Model P-3, were to have been exhibited at the Southern Textile Exposition by Kearny (N. J.) Mfg. Co., Inc., which also has a plant at Greenville, S. C. In addition, a new Kearny development for immediate moisture determination in textiles, known as the Midget Psychrometer, would have been exhibited.

The two yarn conditioning machine models were designed to succeed earlier Kearny models which, after having been subjected to wartime production, are ready to be "retired." The Model P-3 machine is said to apply, without pressure, a fine mist-like dew to the fabric during its passage over the conditioning ducts. It is equipped with a folding down and roll up motion, has a maximum working width of 72 inches with a production range from ten to 25 yards per minute.

### Color Matching Equipment Is New Macbeth Product

The latest and improved Model BX-826 Color Matching Skylight, as manufactured by Macbeth Corp., New York City, which was to have been shown at the Southern Textile Exposition, is a unit including both daylight and horizon sunlight, according to its manufacturer. Macbeth claims, further, that the daylight quality closely matches the ideal daylight employed by color matchers at very high intensities and satisfactory diffusion.

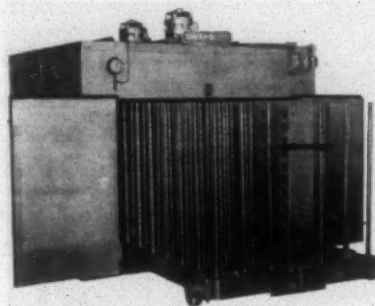
As a check against mismatches under other types of illumination, horizon sunlight is supplied. If colors are matched under daylight and horizon sunlight as supplied by the Macbeth unit, colors will match under any light-

ing, it is claimed. The new product is equipped with blowers, volt meter and double momentary contact mercury tube foot switches.

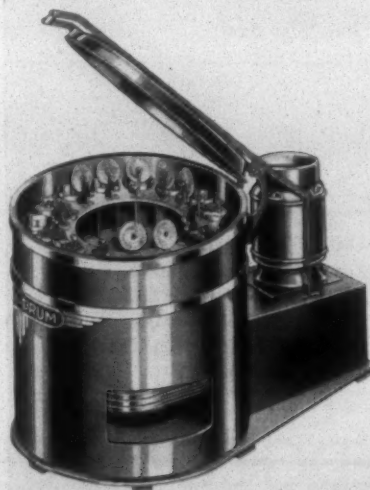
Another Macbeth item which would have been exhibited at Greenville is the line-operated pH meter, described in a previous issue of this magazine.

### Smith, Drum Develops Two Improved Machines

Smith, Drum & Co. of Philadelphia, Pa., recently has introduced two new items for the textile industry, a package dryer and an extractor. The first item (see cut) employs an entirely



new principle of drying yarn in package form, being designed specifically for this purpose. It is called the Two-Way Dryer because it dries both from the inside out and the outside in at the same time, effecting a reduction in drying time from 60 to 75 per cent with resulting saving of steam and electricity. When used in combination with the new Smith, Drum extractor



(see second cut), which itself will extract 1¼-pound packages to a retained moisture content of 42 per cent, the dryer is said to turn out a batch of yarn in less than three hours. The method will eliminate the danger of

color migration and the possibility of salt deposits on surface of the yarn. Design and construction of the extractor is essentially conventional, except that instead of one large basket there are 15 small cylinders mounted in a fixed position on a rotating plate or disc. Both new machines are equipped with automatic controls, which are said to require a minimum of work by the operator. Further information on both may be secured from the company at Allegheny Avenue below Fifth Street, Philadelphia 33, Pa., or its field agents.

### Mathieson Alkali Offers Four Principal Chemicals

The most recent Mathieson Alkali Works development in the textile field is the firm's steamer for continuous open-width processing of goods, described in a recent issue of this magazine. Mathieson chemicals produced for the textile industry include caustic soda, bicarbonate of soda, Textone and chlorine. Caustic soda is a major raw material in rayon manufacture, and is also the principal ingredient in most scouring solutions in kier, jig or steamer preparation of fabrics. In addition, it is also important in mercerizing. Sodium bicarbonate is employed in the removal of residual caustic, may be used after kier, jig or steamer scouring and after mercerization of warp yarns and heavy fabrics. Textone, Mathieson's sodium chlorite product, is used for bleaching all types of cellulosic materials. It is described as having the ability to bleach cellulose to excellent whites without degradation of the cellulose fiber. Textone also may be added to the scouring solution, resulting in a better dye bottom and permitting elimination of gray acid scouring and multiple kier boiling; as a desizing assistant; and as an oxidant for vat and sulfur dyes. Chlorine is used widely in the preparation of hypochlorite solutions for bleaching cotton, linen and rayon, for stripping colors, and as an oxidizing medium in printing.

### Save-Lite Is Promoted By Sherwin-Williams Co.

Save-Lite, a Sherwin-Williams white paint designed to provide maximum light reflection, again is available as a maintenance product which had only a limited production during the war. According to the manufacturer, improve-



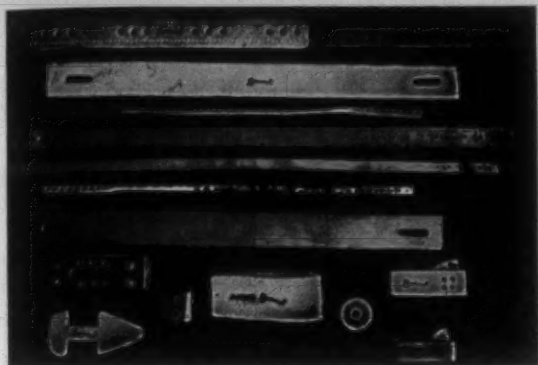


Illustration shows a few of the straps manufactured by us

All of our textile leathers are manufactured from Oak Tan and Hairon Leather. Our Oak Tan Leathers are made from packer hides, selected for substance, weight and fibre strength. Our Hairon Leathers are made from foreign hides that are selected for textile purposes and are especially adapted for this work, owing to the extra length of the fibres.

We manufacture all types of textile leathers for cotton, woolen, worsted, silk and rayon looms.

## Bancroft Belting Co.

145 HIGH STREET

BOSTON, MASS.

*Warehouse and Southern Distributor*

CAROLINA SUPPLY COMPANY

— GREENVILLE, S. C.

# SLAUGHTER Machinery Co.

CHARLOTTE, N. C.

Southern Representatives for

## Mount Hope Machinery Co.

Swing Guiders, Expanders, Weft  
Straighteners

## Venango Engineering Co., Inc.

Raw Stock, Package and Skein  
Dyeing Machinery

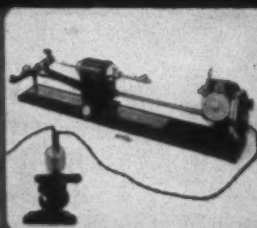
## SEE IT AT BOOTH 114

*First showing  
of  
the  
new*

## "THY-MO-TROL"

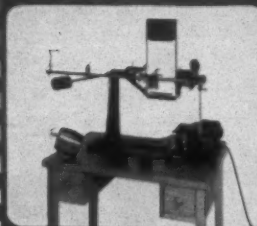
Control—giving constant  
specimen-rate-of-load on  
"J" pendulum type testers

### ALSO SHOWING:



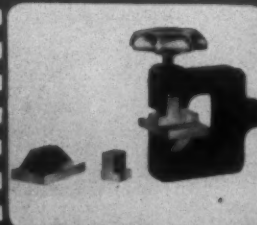
### DOUBLE-ACTION TWIST COUNTER

Both heads turn, greatly  
speeding the test. Many  
improvements.



### IP-2 SERIGRAPH

Light crepeage and tensile  
tester, from single filament to  
2,000 grams.



### NEW FABRIC CLAMP

New method of holding, gives  
results showing tensile  
strength increase up to 10%.  
Available for both vertical  
and horizontal machines.

**See them at the Show**

A Welcome  
awaits you at

## BOOTH 114

REQUEST CATALOG 45

## SCOTT TESTERS, Inc.

115 BLACKSTONE STREET • PROVIDENCE, R. I.



ments through the use of whiter pigments and improved processes for treating the oils to control yellowing have given Save-Lite superior reflection and diffusion characteristics.

During the war, Sherwin-Williams developed a completely co-ordinated series of 17 color harmonies built around seven satin finish wall colors and a new correlated line of seven top quality machine enamels which are used interchangeably as dado enamels. any one of the 17 color harmonies to insure maximum lighting and maximum production.

### Hartex Duofol L Is Introduced To Trade

Hartex Duofol L, a sulfated synthetic ester of superior wetting, softening and re-wetting properties was introduced this month to the textile field by the Hart Products Corp., 1440 Broadway, New York City. The new product is described as a concentrated liquid, miscible with water in all proportions, even when cold, whose clear solutions and high surface active properties are not affected by hard water, salt, alkali or weak acids.

Duofol L is recommended in vat or pad dyeing and for dyeing operations in general to give greater uniformity of shade. It is said to be very effective in producing controlled shrinkage in sanforizing and in obtaining higher slasher speed and greater loom efficiency in rayon warp sizing. Added to printing pastes, Duofol L improves penetration and gives better fastness to soaping, it is claimed. The wetting-back property imparted to fabrics by Duofol L is said to render the fabric highly absorbent. In addition, it acts as a softening agent, making the product doubly desirable in the sanforizing operation. Concentrations as low as 0.04 per cent (about 1/2 ounce per 100 gallons of solution) have proved satisfactory for most applications.\*

### Allis-Chalmers Lists Textile Improvements

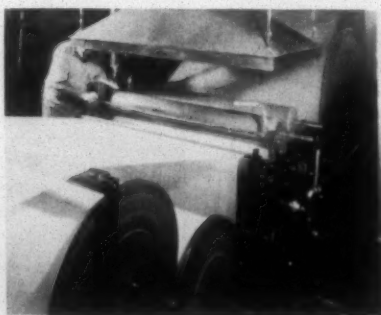
Several new developments in 1945 of special significance to the textile industry—covering power, and drying and heat treating equipment—are summarized by the Allis-Chalmers Mfg. Co., Milwaukee, Wis., in its latest annual engineering review, soon to be released. Engineering contributions in this field were among those made by the company to virtually every phase of

American industry, involving a range of industrial products which Allis-Chalmers describes as the widest in the world.

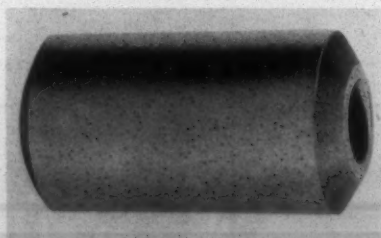
Among outstanding motor improvements in 1945 was the introduction of a new design of the widely applied Allis-Chalmers Quick-Clean motor for textile industries, the review reveals. In operation of the new unit, cooling air passes around the bearings at intake to further reduce bearing operating temperature. Prepacked at the factory, these new type bearings under normal operation are good for 20,000 hours running time without further lubrication. The review points out that a standard two kw (output) dielectric heater is the first of a new line to be offered by Allis-Chalmers in 1946. Operating on a frequency of 27 megacycles, its main design features embody simple control, rugged construction for continuous industrial use, and minimum adjustments. Among its possible applications are drying and heat-treating of textiles.

### Dayton Rubber Serving Southern Textile Plants

The Dayton Rubber Mfg. Co. booth at Greenville would have called attention to the proximity of its Waynesville, N. C., textile products plant to the Southern textile industry and presented recent technical developments of the firm. The new Dayco slasher

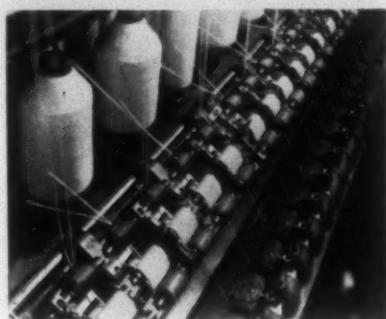


rolls (shown in operation) are described as outstanding examples of the



latest developments in synthetic rubber, feature constant resiliency and may

be used without removal until worn out. The new Type S Dayco cot (see second cut) was designed especially for spinning frames where eyebrowing is a problem, and is engineered for flat clearers. The company states that it decreases flying lint in the spinning room and does not have to be rebuffed. Dayco aprons (third cut shows installation in a Southern mill) have been engineered and held to a variation of only .004 of an inch in thickness, also



are made without splices. They are described as uniform and non-directional, being unaffected by hard ends, moisture or extremes in temperature or humidity.

### Hardaker Will Construct Enlarged Charlotte Plant

John T. Hardaker, Inc., textile machinery concern, with headquarters in Bradford, Eng., and plants in Charlotte, N. C., and Bombay, India, will erect a \$40,000 building to house its Charlotte facilities and bids on the construction project recently were opened. Comprising an area 70 by 90 feet, the new one-story building will be constructed of brick and concrete. It will be three times as large as the present plant. Hardaker makes jacquard machinery for the textile industry, and the enlarged Charlotte plant will enable the company to meet the increased demand for its products.

Re-Bo Mfg. Co., Inc., manufacturer of material handling equipment, recently moved its plant facilities from Knoxville, Tenn., to Bedford, Va., where the former Continental Can Co. building has been occupied. The Bedford plant, with 83,000 square feet of floor space, has ample railroad sidings and covers an area approximately two and a half acres. The enlarged facilities will permit production of five to eight carloads of pallet trucks per week.





## Famous FOR LONG RUNS

Universal Standard Ring Travelers stay on the job. They save you time and money because they do last longer. They are precision equipment, made right and finished right, with the Bowen Patented Bevel Edge that produces smoother, even yarn. Sizes and weights for all kinds and counts of yarn. Send for free samples—today.

Send your exact requirements for samples which you can use and prove in your own mill. Write direct, or to the nearest representative.

Sealed metal containers guarantee that your U. S. Travelers will be full-count, factory-perfect.



### U. S. RING TRAVELER CO.

UNIVERSAL



STANDARD

Providence, R. I.

Greenville, S. C.

AMOS M. BOWEN, President and Treasurer

# TODAY and Every Day

## IT'S QUALITY THAT COUNTS

Quality, backed by 71 years of "know-how" in technical developments. Process Compounds for all types of synthetic and natural fibers produced under modern standards for A-1 quality and efficiency. We solicit inquiry

*For Value... Investigate*

### TINTINOLS & MINOTINTS

Static Control plus 18 Colors

### MINEROL

The Original Conditioner

### RAYON PROCESS OILS

### SS BASE OIL

### BRETON OILS FOR WOOL:

### XX SAPONIFIED, RER, SS.

### MEON

Inhibitor and Stabilizer  
Twist Setter and Strengtheners

**BORNE SCRYMSER COMPANY**  
Originators of the BRETON MINEROL PROCESS  
for Fiber Conditioning  
ESTABLISHED 1874

ELIZABETH, N. J.

CHARLOTTE, N. C.

NEW ENGLAND REPRESENTATIVES  
A. M. KNIGHT West Yarmouth, Mass. W. M. DYNES West Springfield, Mass. S. T. DOUGLAS, JR. Westwood, Mass.

SOUTHERN REPRESENTATIVES  
R. C. YOUNG Charlotte, N. C. JOHN FERGUSON LaGrange, Ga.



*Manufacturers of*  
**All Type Fluted Rolls**  
 COMBERS — SPINNING — LAP MACHINES

**DRAWING ROLLS  
 A SPECIALTY**



We also arrange present  
 drawing frames for long  
 synthetic staple up to  
 and including three inch

**Gossett Machine Works**


West Franklin Avenue Gastonia, N. C.  
 Phone 213

**SOLVAY**  
 TRADE MARK REG. U. S. PAT. OFF.

Industry's  
 Dependable Source  
 for

**ALKALIES**

and related products

Soda Ash	Para-Dichlorobenzene	Para-Baco*
Calcium Chloride		Liquid Chlorine
Caustic Soda		Caustic Potash
Special Alkalies		Sodium Nitrite
Ammonium Chloride		Potassium Carbonate

**SOLVAY SALES CORPORATION**

Alkalies and Chemical Products Manufactured by  
 The Solvay Process Company

40 RECTOR STREET • NEW YORK 6, N. Y.

— BRANCH SALES OFFICES: —

Boston • Charlotte • Chicago • Cincinnati • Cleveland  
 Detroit • New Orleans • New York • Philadelphia  
 Pittsburgh • St. Louis • Syracuse

\*Trade Mark Reg. U. S. Pat. Off.

**Students Hear Series of Technical Lectures**

In recent weeks the student section of the American Association of Textile Colorists and Chemists at the North Carolina State College school of textiles has been host to three speakers, Benjamin Verity, Reid Tull and Charles B. Ordway.

Mr. Verity, a technical representative for Carbic Color & Chemical Co., spent an entire day on lectures and demonstrations before the various classes. His lectures covered the use of indigosols and algosols, technical data in dyeing and printing, and the value of efficiency.

Mr. Tull of Arnold, Hoffman & Co. also presented three lectures. His first dealt with urea formaldehyde resins, cationic finishes, rewetting agents, water repellent agents and sanforizing. The second talk stressed the value of a laboratory in relation to maintaining constant checks on quality and money value of products. His final lecture covered warp sizing compounds and problems incurred in sizing operations.

Mr. Ordway, American Aniline Products, Inc., technical representative, lectured on "Evaluation of Textile Auxiliaries," "Naphthols and Their Many Uses Through Careful Selection," and "The Preparation and Processing of Synthetic and Blended Fabrics." His remarks were supplemented by blackboard diagrams, samples of commercial products, finished fabrics and pamphlets.

\* \* \*

In another recent address, this time before the Mt. Holly, N. C., Rotary Club, Mr. Ordway discussed "What Research and Development Means to the Progress of the Textile Industry." His remarks covered the development of water and wind resistant cotton fabrics, shrinkproofing of woollens through chlorination, improvement of mildew and rot resistance in cottons, and improvement of cotton and rayon fabric waterproofing.

**Du Pont Cites Activities During War Period**

The full scope of the war production role of E. I. du Pont de Nemours & Co. was revealed this month for the first time in a special report to stockholders from W. S. Carpenter, Jr., president. During each of the last three war years, the company increased its production of chemical materials from its own plants to more than double 1939 levels, the report stated. Included were nylon, plastics, rayon yarn, dyestuffs, industrial chemicals of many types, finishes and a variety of other chemical products.

In addition, Du Pont built for the government 54 plants of various sizes at 32 different locations. Total cost of these facilities engineered, designed and constructed for the government by Du Pont's engineering department was \$1,034,000,000.

Du Pont-operated, government-owned plants produced military explosives, ammonia, methanol, neoprene synthetic rubber, and various chemical specialty materials with a total value of \$895,000,000.

"World War II brought to the Du Pont Co. the necessity of interrupting its regular activities and development to perform, like so many millions of individuals, a simple duty," wrote Mr. Carpenter. "Now, the end of the war finds Du Pont, as it does the nation, eager to resume its normal constructive role. It should be plain that the business interests of the company lie, primarily and overwhelmingly,



with peace. However essential to modern warfare the chemical industry may be, its prosperity and its prospects can be realized only in a peaceful, orderly society. Every practical consideration, therefore, in addition to the obvious personal and humanitarian aspects, prompts the prayer that means will be found to build and insure world peace forever."

Materials produced for military and home front consumption "ranged from chemicals used in production of heavy armaments to such homely necessities as household cement," Mr. Carpenter said. Major items included: 537,700,000 pounds of rayon yarn and staple fiber; 80,000,000 pounds of nylon yarn and flake; 301,932,000 pounds of neoprene synthetic rubber; and 7,700,000,000 pounds of sulphuric acid—the company's largest single bulk product.

The largest single Du Pont undertaking of the war, he stated, was the company's part in the atomic energy project, in which Du Pont designed and constructed a small-scale pilot plant at the Clinton Engineer Works in Tennessee, and designed, built and operated the \$350,000,000 Hanford Engineer Works near Pasco, Wash., for the manufacture of plutonium.

Commending "the sustained co-operation and loyalty" of the employees, which "contributed much to the handling of war commitments," Du Pont's president noted that no major labor difficulties occurred and that the loss in man-hours due to work stoppage was less than 1/50 of one per cent.

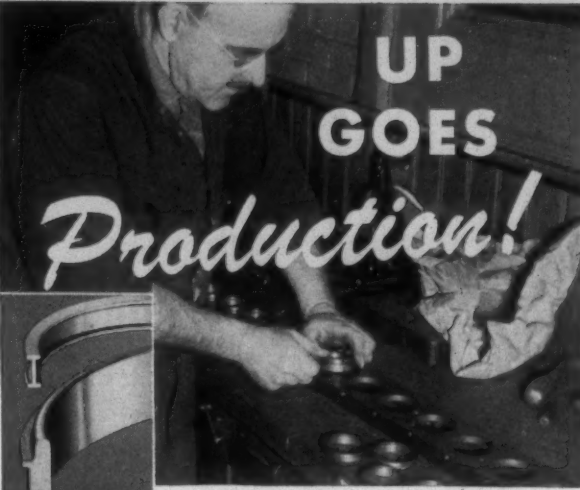
Outlining Du Pont's safety record, Mr. Carpenter reported that the accident "frequency rate"—measured by the number of time-losing injuries per million man hours worked—averaged 1.44, compared with a general wartime average of approximately ten for the entire U. S. chemical industry and 14 for U. S. industry as a whole. The explosives program's record of 1.41 showed less than one lost-time accident for each ten million pounds of military explosives produced. Peak employment was reached in September, 1942, with a total of 136,300, made up of 60,800 in company locations and 75,500 at government-owned plants and on construction work. Nearly 30 per cent of employees were women when the war ended.

### Chemists Hear Discussion of Azos

Dr. C. E. Sparks of the Jackson Laboratory, E. I. du Pont de Nemours & Co., Inc., presented "A Brief Survey of Azo Chemistry" to the Carolina-Piedmont Section of the American Chemical Society at Kannapolis, N. C., March 15. Dr. Sparks described azo colors as a class of dyes which are suitable for use on practically any fiber, and stated that through their use a dyer has a wide choice of fastness properties and methods of application. His paper dealt with the types of dyes used on the various fibers and detailed the chemical nature of each class. Dyeing and fastness properties of each class were discussed, and a resume of color structure was presented. The speaker was assisted by Dr. J. F. Laucis and Dr. J. H. Trepagier of Jackson Laboratory, and introduced by D. C. Newman, Southern sales manager for the Du Pont dyestuffs division.

### Synthetic Fiber Institute Is Conducted

A two-day institute of staple synthetic fibers was held March 11 and 12 at the North Carolina Vocational Textile School, Belmont. Production and processing of the fibers was studied by a number of textile plant operating officials.



**UP  
GOES  
*Production!***

**TEXTILE SHOW — BOOTH 202**

Be generous with new rings — especially now when such repairs are practically the only quick chance for increasing production. Simply replacing worn rings will improve operation markedly, while with our Eadie speed rings, you get an entirely new standard of production.

**WHITINSVILLE (MASS.)**  
**SPINNING RING CO.**  
*Makers of Spinning and*  *Twister Rings since 1873*

Looking to the future  
with a proud past

*Ray Chemical Co.*  
Charlotte, N. C.



**Tested and Approved**

**TEXTILE OILS  
CHEMICALS  
AND SOAPS**



# RAPIDASE

for de-sizing cottons,  
rayons and mixed goods

Assures rapid, dependable  
de-sizing.

Our technical staff always at  
your service.

**WALLERSTEIN COMPANY, INC.**  
180 MADISON AVENUE • NEW YORK 16

## VOGEL No. 14 SOUTHERN OUTFIT

A durable, economical closet  
for Mills, Factories and all  
types of industrial installation



When installing No. 14  
closet trap must be  
set directly under bowl.

The Vogel No. 14  
has a vitreous china  
top supply bowl,  
heavy flush valve,  
reinforced hard-  
wood seat, painted  
white enameled  
drum shaped tank  
and union ell flush  
connection.

(The Number 14  
is not frost-proof)

**Joseph A. Vogel  
Company**

Wilmington 99 • Delaware

**VOGEL** PATENTED **PRODUCTS**

## Standard and Army Color Cards Calibrated

The fundamental calibration of the widely used standard color card of America and the United States Army color card has been completed at the National Bureau of Standards. The calibration was carried out partly by means of the spectrophotometer and partly by colorimetric comparison with the non-fluorescent Munsell color standards already calibrated.

Since its formation during World War I, the Textile Color Card Association of the United States has performed a color-forecasting service and a color-standardizing service for the textile and allied industries. It is pointed out by the Bureau of Standards that the first of these services enables the textile manufacturer, dyer and dyestuff producer to plan his production with confidence that his choice of colors will dovetail satisfactorily with that for merchandise from other industries serving the fashion trade. The second service makes it possible for the standard color name always to signify the same color.

The results of the fundamental calibration recently completed will permit procurement agents, both government and private, to extend conveniently their use of the T.C.C.A. color standards wherever applicable to requirements now stated in Munsell terms or terms of other fundamentally calibrated standards. Furthermore, the bureau states, from this co-ordination it will be immediately evident how to specify the colors of non-textile objects—plastics, vitreous enamels, etc.—when it is necessary that they match textile colors now specified by reference to the T.C.C.A. cards.

## Stein, Hall Branch Managers Convene

Branch managers of Stein, Hall & Co., Inc., manufacturer of textile supplies, from 12 cities in this country and Canada attended a conference with executives and home office officials in New York City Feb. 7 and 8, the first branch managers' meeting since the company's reorganization. Means of better co-ordination between branch office and home office activities were discussed. Conference speakers included Edwin Stein, president; M. S. Rosenthal, executive vice-president; D. M. Hawley, vice-president; O. H. Clapp, vice-president in charge of sales; Robert Rau, treasurer; G. W. Brew, traffic manager; M. M. Kroll, credit manager and J. R. Adams, manager, development department of the technical division.

## Textile Machinery Prices To Rise

While a general price rise may be given the textile machinery industry at a later date, present considerations of the Office of Price Administration point to immediate revision of the machine and machine parts regulation, M.P.R.-136, to allow producers to "in-line" their prices with current conditions.

In the cases of new products, new types of machinery and where there have been some modifications in the old types of machinery, the manufacturers will be permitted to adopt the well-tried "in-line" method of pricing which takes the nearest competitors' price for similar articles as the basis for setting a new price. Approval of the price thus arrived at must then be granted by O.P.A.

However, after the first sale has been made under the



new pricing method, the costs must be refigured and ceilings revised, if found necessary. Again, here O.P.A. must give its approval in each individual case.

### Dan River Developments Being Shown

An exhibit featuring various applications of plastics to textiles will be displayed at the National Plastics Exposition in Grand Central Palace, New York City, on April 22 to 27, by Riverside & Dan River Cotton Mills, Inc., Danville, Va., and Walter Kidde & Co., Belleville, N. J., builders of the Fiber Bonded machines developed by Dan River.

These applications of plastics in the textile industry are new and revolutionary in character and have already aroused a wide interest in the textile industry, both in the United States and abroad. One of the Fiber Bonded machines showing the treatment of textile rovings and yarns with synthetic resins will be in operation in the booth. There will also be a display of products of this machine and commercial applications of these products, as well as products of other processes in the fabrication of which plastics perform essential functions.

Similar displays have been made recently at the convention of the American Association of Textile Chemists and Colorists in New York, Jan. 3 to 5, and at the Exposition of Chemical Industries in New York, Feb. 25 to March 2. The display at the plastics exposition will be directed specifically to a demonstration of the major part which plastics are now enabled to play in practically every division of the textile industry by reason of these Dan River processes.

### Russia Plans To Double Cotton Production

Plans to double her cotton production within eight years have been incorporated into Russia's post-war development programs, according to reliable sources. During 1946 the Russians will plant an estimated 815,000 hectares (2,000,000 acres) from which they expect to harvest 1,160,000 tons, or about the equivalent of 4,640,000 American bales. By 1953 the program calls for expanded planting to 1,000,000 hectares (2,470,000 acres) and with improved production to yield 2,400,000 tons, an increase of about 5,000,000 bales over this year's production.

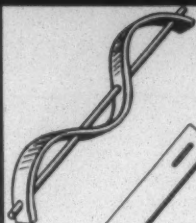
### Atlantic Cotton Group Meets March 29-30

Approximately 300 members of the Atlantic Cotton Association, representing Virginia, the Carolinas, Georgia, Alabama and Florida, will meet in annual convention at Poinsett Hotel, Greenville, S. C., March 29-30. The Greenville Cotton Association will serve as host for the convention. Richard Harriss, former president of the New York Cotton Exchange, will attend. John M. Little of Union, S. C., is president of the association.

### Twine and Cordage Group Formed

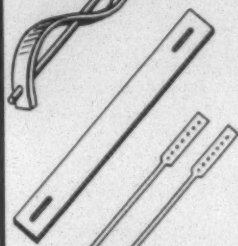
A sub-group of the Carded Yarn Association was formed March 8 at Charlotte by representatives of 37 cotton twine and cordage manufacturing firms. Officers of the group are Robert N. Adair of Maysville, Ky., chairman, and William G. Ragsdale of Jamestown, N. C., alternate chairman. E. Owen Fitzsimons is president of the Carded Yarn Association.

## PAGE TEXTILE LEATHERS



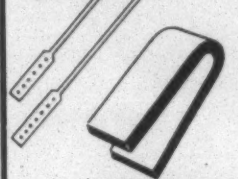
### SPINDLE BUMPERS

From the finest obtainable Leather.



### CHECK STRAPS

Made from the finest Hair-on leather.



### HARNESS STRAPS

Made from selected Hair-on leather.

### LUG STRAPS

Strong, long wearing, Economical.

MISCELLANEOUS LOOM LEATHERS

**PAGE BELTING CO.**

CONCORD, N. H., U. S. A.

# Sterling Ring Travelers

### SAVINGS

Travelers that run longer, while giving good results, add up to savings which are sorely needed today.

Let us suggest a Traveler to run as a test.

Southern Representatives

D. J. QUILLEN

Box 443, Spartanburg, S. C.

H. B. CABANISS

Monroe, N. C.

D. C. ANDERSON

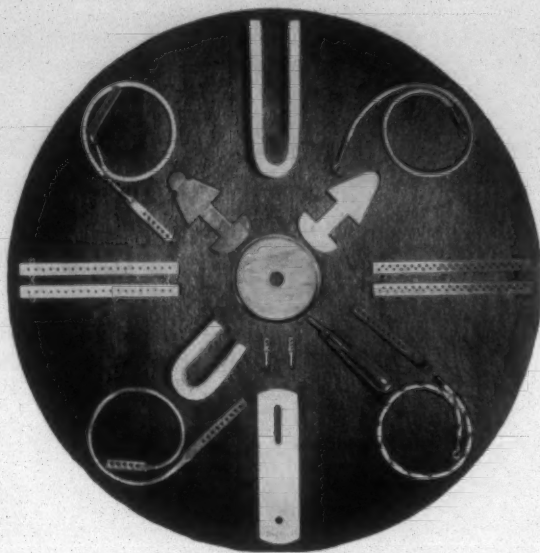
Box 629, Cedartown, Ga.

**STERLING RING TRAVELER CO.**  
FALL RIVER, MASS.



## RICE DOBBY CHAIN CO.

MILLBURY, MASS., U. S. A.



Southern Representatives

John P. Batson, P. O. Box 1055, Greenville, S. C.

R. E. L. Holt, Jr., P. O. Box 1474, Greensboro, N. C.

(READY TO SERVE YOU)

## WENTWORTH

Double Duty



Travelers

Reg. U. S. Pat. Off.

HICKS — AMERICAN — WILSON — U. S. STANDARD

Last Longer, Make Stronger Yarn,  
Run Clear, preserve the SPINNING  
RING. The greatest improvement  
entering the spinning room since the  
advent of the HIGH SPEED SPINDLE

NATIONAL — ETARTNEP FINISH  
A NEW CHEMICAL TREATMENT

Manufactured only by the

**NATIONAL RING TRAVELER CO.**

PAWTUCKET, R. I.

131 W. First St., Charlotte, N. C.

L. EVERETT TAYLOR, So. Agent

## 1945 Fiber Consumption Shows Decline

Total United States consumption of cotton, rayon, and wool in 1945 amounted to 5,923,900,000 pounds, a decline of three per cent from 1944, states *Rayon Organon*, published by the Textile Economics Bureau, Inc. This 1945 total was 14 per cent below the record consumption of 6,871,300,000 pounds in 1942.

Rayon consumption was at an all-time high figure of 767,500,000 pounds, representing a nine per cent increase over 1944. Wool consumed in 1945 totaled 648,200,000 pounds, a figure near its record consumption of 652,200,000 pounds in 1941. Cotton consumption amounted to 4,508,200,000 pounds, a decline of six per cent from 1944 and a figure of 20 per cent below the record 1942 consumption of 5,636,700,000 pounds. However, 1945 cotton consumption was still well above its 1936-1940 average of 3,525,900,000 pounds. Silk consumption in 1945 was nominal, a situation that has prevailed since 1942.

By percentage of the four-fiber total, the 1945 figures were as follows: cotton 76.1 per cent, rayon 13.0 per cent, and wool 10.9 per cent. This rayon percentage was a new high figure and wool's participation in the total was the largest since 1935. But cotton's percentage was the lowest on record. By comparison, the pre-war figures for 1940 were cotton 81.0 per cent, rayon 9.9 per cent, wool 8.4 per cent and silk 0.7 per cent.

Consumption of cellulose in rayon manufacture during 1945 amounted to 400,000 tons, composed of 297,000 tons of dissolving wood pulp and 103,000 tons of refined cotton linters. Both of these figures represent new high figures, but wood pulp consumption has increased by only six per cent since 1942, while cotton linters' useage has more than doubled.

Domestic deliveries of rayon by producers in February totaled 63,600,000 pounds, compared with 69,700,000 pounds in January. This nine per cent decline was entirely due to the fewer number of working days. February rayon deliveries were composed of 50,400,000 pounds of filament yarn and 13,200,000 pounds of staple fiber. Total stocks of rayon held by producers at the end of February at 13,900,000 pounds continued nominal, amounting to but a six-days supply. Filament yarn stocks were 9,900,000 pounds and staple fiber stocks were 4,000,000 on Feb. 28.

## Special Yarn Used in Spray Hose

United States Rubber Co. has announced the development of a new agricultural spray hose constructed with special yarn perfected during the war which gives the hose lighter weight and increased strength. The hose is designed for spraying fruit orchards and field crops infested with insects. It is made of synthetic rubber, reinforced with two layers of fabric woven with Ustex, the cotton yarn

## BYRD MILLER

WOODSIDE BLDG., GREENVILLE, S. C.

Representing in the Carolinas

**BURKART-SCHIER CHEMICAL CO.**

CHATTANOOGA, TENNESSEE



treated with plastics to increase its strength as much as 70 per cent and used during the war to make parachute harness for Army airmen. This hose was formerly built with three layers of untreated cotton yarn, giving it greater weight and bulk but less strength and flexibility than the new product.

### Jap Textile Inventory Is Ordered

A complete inventory of all textile stock in Japan as of March 10 has been ordered by General MacArthur's headquarters in a directive to the Japanese government. The inventory is designed to increase the reliability of Japanese textile statistics and will provide more detailed data concerning textile stocks not previously reported. Practically all textiles except silk will be included in the inventory.

### Mill Community Life To Be Surveyed

A study of life in mill communities of the South will be made by Dr. William Hays Simpson of the Duke University faculty. Dr. Simpson's investigations will entail visits to Southern textile mills and interviews with managements, the people, the health departments of mill communities and with other groups or agencies connected with life in these communities. He also will study conditions in other communities for the purpose of ascertaining what contrasts or similarities exist between the several types of communities.

A preliminary report of the progress of Dr. Simpson's study will be made at the annual convention of the American Cotton Manufacturers Association at Pinehurst, N. C., May 14-16. Upon completion of his survey, Dr. Simpson will publish his findings in book form. They also will serve as the basis of a series of magazine articles.

### Cotton Striving To Hold Bag Trade

Major successes are being achieved in a campaign to hold the vast bag market for cotton through a direct-to-the-consumer approach, the National Cotton Council reports. Jointly sponsored by the council and the Textile Bag Manufacturers Association, the campaign points out to the consumer that by purchasing commodities such as feed, flour and sugar packaged in cotton bags, he is actually earning a bonus in fabrics for home sewing.

Designed to protect what has developed during the war years into a million-bale annual outlet for cotton, the 1946 program lays emphasis on the fact that the billion yards of cotton fabric going into bags this year constitute an invaluable reservoir of cloth for home sewing at a time of unusual fabric shortages.

### Surplus Cotton Apparel Fabric On Sale

Almost 20,000,000 yards in a variety of weaves which cost the government in excess of \$5,500,000 is being offered in the first major disposal of surplus cotton apparel fabric since V-J Day by the War Assets Corp. The sale, which is being conducted through regional consumer goods offices maintained by W.A.C. in 11 cities, opened March 4. The joint sale, in which the C.P.A. has joined with W.A.C., will make certain that most of the fabric is channelled into the manufacturers of specific garments.

*Smooth* warps for  
easy weaving

with

*Laurel*  
RAYON SIZE\*

Your rayon warps will be smoother, stronger, cleaner, more resilient and more resistant to atmospheric action if you use Laurel Rayon Size. Unlike ordinary sizes, Laurel Rayon Size penetrates and envelops the yarn—binds the filaments together. It reduces chafing and breakage, increases elasticity, equalizes variations in yarn tension. Does not shed. Removed quickly and easily in regular scour. Laurel Rayon Size gives high loom efficiency. Leaves cloth soft, smooth with good appearance and with minimum defects.

Sizers and weavers throughout the industry tell us Laurel Rayon Size simplifies and speeds the weaving process. If you are not now using Laurel Rayon Size, save time and costs by sending for a trial order today. Available for immediate delivery. Our Laboratory Technicians will gladly recommend a formula that will meet your exact requirements.

SOAPS • OILS • FINISHES

*Laurel*

SOAP MANUFACTURING CO. INC.

Wm. H. Bertolet's Sons • Established 1909

Tioga, Thompson & Almond Sts., Philadelphia 34, Pa.

WAREHOUSES: PATERSON, N. J. • CHATTANOOGA, TENN. • CHARLOTTE, N. C.

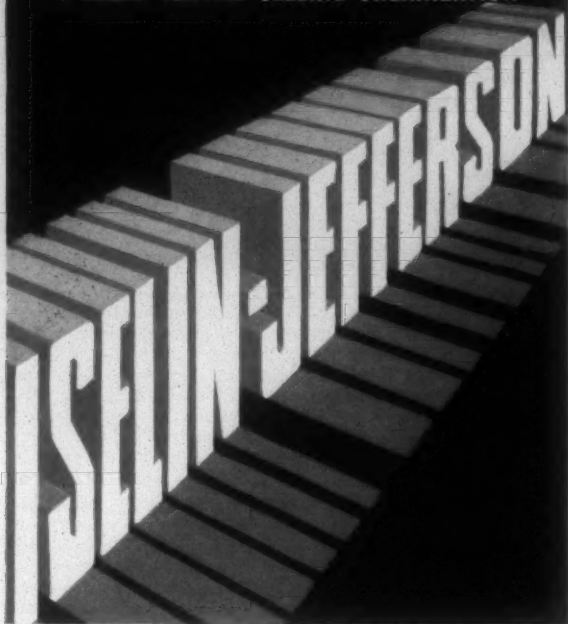
**PENICK & FORD, LTD.**  
INCORPORATED

CORN STARCHES, DEXTRINES, GUMS, CORN SUGARS & SYRUPS  
NEW YORK, N. Y. — CEDAR RAPIDS, IOWA  
SOUTHERN OFFICES: ATLANTA, GA. — SPARTANBURG, S. C.

*John:*  
Those analyses  
which the Penick &  
Ford Textile Lab-  
oratory in Atlanta  
made for us certainly  
helped solve our warp  
sizing problems.  
*Jim*



## A GREAT TEXTILE SELLING ORGANIZATION



### BRANCH OFFICES

CHICAGO, ILL., 1375 Merchandise Mart  
BOSTON, MASS., 99 Chauncy St.  
NEW ORLEANS, LA., 201 Baiter Bldg.  
PHILADELPHIA, PA., 1336 Widener Bldg.  
ATLANTA, GA., 216-217 Walton Bldg.  
ST. LOUIS, MO., 915 Olive Street  
SAN FRANCISCO, CALIF., 833 Market St.

### SELLING AGENTS

**ISELIN-JEFFERSON**  
COMPANY

90 WORTH STREET, N. Y. C.

*William Iselin & Co., Inc., Factors*

## SATISFACTION GIVEN—NOT PROMISED

**Jarrett's**  
TRADE MARK

### HEAVY CHEMICALS

Soda Ash, Caustic Soda, Liquid Chlorine,  
Calcium Chloride, Sodium Bicarbonate,  
Salt—

### SANITARY CHEMICALS

Cleaners, Disinfectants, Deodorants

### DDT POWDER and SOLUTIONS

Insecticides, Soaps and Waxes

ALL KINDS CHEMICALS AND SUPPLIES

*Your inquiries will be appreciated*

**CECIL H. JARRETT & CO.**

P. O. Box 647 NEWTON, N. C. Phone 154

## Officers Elected By Braiders Group

C. P. Berolzheimer of the Diamond Braiding Mills, Chicago Heights, Ill., was elected chairman of the braiders group of the Cotton-Textile Institute at an organization meeting this month. Sam R. Fry of the Narrow Fabrics Co., Reading, Pa., was elected vice-chairman.

The following members were elected to the advisory committee: Henry Jacobson, Small Bros. Mfg. Co., Fall River, Mass.; Robert T. Dawes, Thos. Taylor & Sons, Hudson, Mass.; C. A. Cosman, Continental Elastic Corp., New Bedford, Mass.; H. L. Raus, General Shoe Lace Co., Louisville, Ky.; G. M. Elliott, Rhode Island Textile Co., Pawtucket, R. I.; and A. T. Joyal, Joyal-Van Dale, Inc., Pawtucket, R. I.

Charter members of the group are as follows: Joyal-Van Dale, Inc.; International Braid Co.; Mitchellace, Inc.; Shoe Lace Co.; Pepperell Braiding Co.; Rubin Trimming Works; Hutmacher Braiding Co.; Diamond Braiding Mills, Inc.; Richard Ponton Co.; Continental Elastic Corp.; Small Bros. Mfg. Co.; Thos. Taylor & Sons, Inc.; The Narrow Fabrics Co.; General Shoe Lace Co.; St. Louis Braid Co.; Rhode Island Textile Co.; Worcester Braiding Co.; Glencairn Mfg. Co. and Providence Braid Co.

## Sanders Heads Textile Research Institute

The board of directors of Textile Research Institute, Inc., on March 7 elected Lewis Sanders to the office of president, to serve as head of the institute's administrative staff.



Mr. Sanders, pictured at left, is a native New Yorker. Until January, 1946, he served in the office of the Chief of Staff on the Special Staff in Washington, with the rank of colonel. For two years he was consultant on manpower and industrial matters to the Senate Committee on Military Affairs, and for three years he was chief of the re-employment division of the Selective Service

System, which division he organized. In addition, he supervised the determination of the maximum war effort of which the United States was capable, including a study of all of the country's industrial and manpower needs and resources. In World War I he served as a major of field artillery.

Mr. Sanders is a graduate of Stevens Institute of Technology with the degree of mechanical engineer. He has done research work and directed a research staff of 36 engineers in the General Electric Co. In the field of research he has also been advisor to the head of a large university with respect to the institution's research projects. In the realm of business, Mr. Sanders' experience includes the organization and financing of corporations, the design, construction, and operation of plants, and the handling of labor and labor problems. As a consulting engineer, he has worked with cotton, woolen and silk mills on power plant and lighting problems.

Textile Research Institute was founded 16 years ago by a small group of men who believed in the value to the industry of broad-gauge research embracing all fibers and conducted for the benefit of the industry as a whole. For a number of years, they tested the soundness of their ideas



through research carried on largely through voluntary personal services of the founders and with the expenditure of modest sums of money. Having established the soundness of the basic idea, the institute two years ago embarked on a course of planned development based on the principle of service in its broadest sense to the textile industry as a whole.

The growth of the institute has included the building of the institute's own research laboratory at Princeton, N. J. Furthermore, in recognition of the need for trained scientists the institute has established, in co-operation with Princeton University, a plan whereby selected graduate students are given fellowships which enable them to receive advanced training in science and engineering directed toward textile research. Another important function of the institute is the dissemination of research information. The institute publishes *Textile Research Journal*, a scientific journal issued monthly and devoted exclusively to the interest of textile research. The expanded activities of the institute have now progressed to the point where the services of a full-time president are required and the background of Mr. Sanders, which includes both research and broad business experience, is expected to contribute in large measure to the continued growth of the institute's usefulness to the textile industry.

### Los Angeles Textile Show Postponed

The national textile industry exposition, scheduled for Los Angeles this fall, has been postponed until next year. According to Frank B. McNeil, chairman of the board of the exposition corporation, the postponement was made at the request of the nation's largest textile manufacturers who had planned to exhibit there during August and September.

"Textile manufacturers and processors are unable to introduce their new post-war products until O. P. A. establishes prices for newly developed fabrics, materials and designs," said McNeil. "Consequently, it is impossible to forecast that price schedules will be available in time for the exposition.

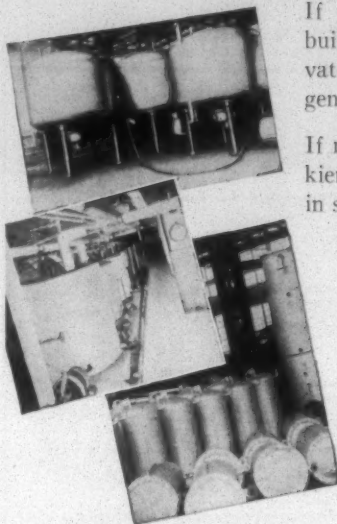
"Our exposition officers and directors agree with the textile manufacturers that postponement until next year will result in a much more dramatic exposition, and, at the same time show materials and products which will be immediately available to the public."

### Electrical Engineers Meet May 14-16

Members of the Southern District, American Institute of Electrical Engineers, will convene at Grove Park Inn, Asheville, N. C., May 14-16. The technical program will consist of a symposium on textiles of particular interest in the district. Two afternoons will be devoted to recreation programs and inspection trips to American Enka Corp. plant and other industrial sites. The board of directors of the institute will hold its May meeting concurrently with the technical meeting on May 14.

Two units of the non-electric permanent magnet separators, as manufactured by the Eriez Mfg. Co. of Erie, Pa., have been added to the equipment in the line of cotton opening machinery at the North Carolina State College school of textiles, Raleigh.

## Is your mill planning EXPANSION or MODERNIZATION?



If your contemplated new buildings require modern elevated tanks for sprinkler or general service—

If new products call for new kiers, kettles, vats or vessels in special alloy steels—

... then our engineering department (with long experience in servicing the textile industry), can be of *real service* to you. Submit us your problems, or write for a copy of "Tank Talk."

**R.D. COLE MFG. CO.** ESTABLISHED 1854  
Newnan Ga.

TANKS      TOWERS      CYLINDERS      VESSELS

Our **SERVICE** Backed by Years of Experience  
—enables us to give you the **BEST** in the

#### MANUFACTURE OF

Steel Rolls  
Flyer Pressers  
Card Room Spindles  
Lifting Rods

#### REPAIR OF

Steel Rolls  
Roving Spindles  
Spinning Spindles  
Flyers

#### OVERHAULING OF

Fly Frames  
Spinning Frames  
Twisters  
Spoolers

#### MOVING OF

All Kinds of Textile Machinery

**Southern**  
**SPINDLE & FLYER CO., Inc.**

WE MANUFACTURE, OVERHAUL AND REPAIR COTTON MILL MACHINERY

**CHARLOTTE, N. C.**

W. H. Monty, Pres. and Treas.



## SELLING AGENTS FOR SOUTHERN COTTON GOODS

### CURRAN & BARRY

320 BROADWAY  
NEW YORK, N. Y.

### WELLINGTON SEARS CO.

65 WORTH STREET NEW YORK

REPRESENTING 18 MILLS—MERCHANDISING 25,000 FABRICS

Industrial Fabrics — Garment Fabrics  
Towels and Toweling — Drapery and Upholstery  
Fine Cottons — Rayon

#### BRANCHES

BOSTON ATLANTA ST. LOUIS DETROIT SAN FRANCISCO  
PHILADELPHIA CHICAGO NEW ORLEANS LOS ANGELES

#### Merchandising

Domestic

Export

### JOSHUA L. BAILY & CO.

40 WORTH STREET NEW YORK

### NEISLER MILLS COMPANY, Inc.

*Selling Agents*

40 WORTH STREET, NEW YORK

BOSTON CHICAGO LOS ANGELES SAN FRANCISCO



Dixon's Patent Reversible  
and Locking in Back Saddle  
with New Oiling Device  
three Saddles in one,  
also Dixon's Patent Round  
Head Stirrup.



Send for samples

Dixon Lubricating Saddle Co., Bristol, R. I.

## Cotton Goods Market

A general price increase for virtually all cotton textiles and yarns, based on raw cotton prices only slightly below current levels for spot cotton, was announced March 8 by the Office of Price Administration with the warning that every effort would be made to prevent raw cotton prices from rising further.

The increase varies for different types of fabrics from five to ten per cent, or  $2\frac{1}{2}$  to five cents a pound. An additional incentive price increase of five per cent is allowed for specified staple fabrics required for clothing and essential industrial and agricultural uses.

At the same time the Civilian Production Administration announced that a large number of looms would have to be shifted to the fabrics on which the five per cent incentive is granted.

In calculating the ceilings the Office of Price Administration used the net worth formula up to the parity price for cotton and for the increased wages now being paid by mills, and then granted the additional amount to reflect the higher than parity cotton costs in order to stimulate greater production of cotton goods. The general increase, before the additional five per cent incentive is applied, is in excess of "the minimum requirements of the law."

Though several selling executives were reluctant to express an opinion on just what the changes will mean until individual prices have been figured, it was indicated by others that the incentive premium of five per cent over and above the new ceilings should result in better output, though there was strong doubt in many market minds as to whether production can be brought up 50 per cent over the third quarter output of last year, as Washington hopes.

Big question in many market minds continues to be the price on raw cotton, it is said. Every section of the industry is watching this situation anxiously, sources in Worth Street assert. Certainly the whole effect of the present price rise could be nullified to a large degree by a continued upward spiral in cotton costs, it is pointed out.

There is considerable interest in the market over the millions of yard of ducks, tent and herringbone twills being declared surplus by the War Assets Corp. It is generally agreed that these goods will be quickly absorbed by the fabric-hungry trade.

Reports continue to be heard to the effect that M-317A for the second quarter of this year will include a special column to take care of users of industrial fabrics. Though some selling houses are of the opinion that such a move will not mean more goods, there is approval for this idea among the big companies that have been having a difficult time getting enough goods to cover operations.

### J. P. STEVENS & CO., Inc.

*fabrics for diversified uses*

1410 BROADWAY

44 LEONARD STREET

EMPIRE STATE BUILDING

NEW YORK



# Cotton Yarns Market

Spinners are said to be watching closely developments in the administration's drive to check widespread speculative buying of cotton. One reaction to the latest price adjustment on cotton yarn was that any increase obtained by the industry, would be eventually rendered obsolete, unless the soaring cost of cotton could be curbed.

Noting the Office of Economic Stabilization directive which, in spite of denunciation by the various exchanges, moves cotton futures margins up to \$30 per bale, under existing cotton prices, spokesmen have indicated that bitter opposition could be expected from the cotton bloc and the exchanges.

Actual endorsement of this ruling was lacking, since many in the trade feel that this matter is a bit removed from the yarn market. It was urged, however, that some sort of medium must be arrived at to prevent another boom-crash of spinner squeezes from the mounting cost of cotton.

Meanwhile, there has been little change in the movement of yarn since the recent issue of Amendment 14 to SO-131. This is laid partially to dissatisfaction with the adjustments and, in some cases, bookkeeping delays where spinners have not fully completed application of the price boosts to particular cases.

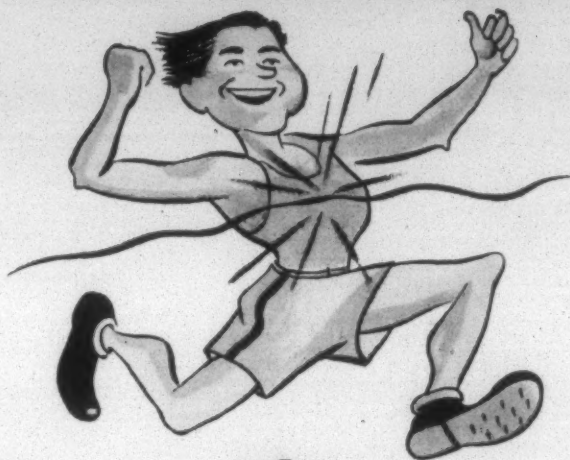
The Census Bureau has reported that the cotton spinning industry operated during February at 113.1 per cent of capacity, on a two-shift, 80-hour week basis, compared with 101.5 per cent during January this year, and 122.1 per cent during February last year.

Spinning spindles in place February 28 totaled 23,769,140, of which 21,628,796 were active at some time during the month, compared with 23,800,176 and 21,629,882 for January this year, and 23,122,638 and 22,219,696 for February a year ago.

Active spindle hours for February totaled 8,497,233,222 or an average of 357 hours per spindle in place, compared with 7,732,919,207 and 325 for January this year, and 9,955,968,062 and 386 for February last year.

Spinning spindles in place February included: in cotton-growing states 18,031,584, of which 16,729,620 were active, compared with 18,063,228 and 16,788,598 for January this year, and 23,122,638 and 22,219,696 for February a year ago, and in New England states 5,124,716 and 4,359,272 compared with 5,120,400, 4,317,144, and 4,898,044 and 4,327,744.

## DESIZE WITH EXSIZE



## The Winning Finish!

**Y**OU'RE BOUND to be way out in front if you finish your fabrics with EXSIZE... the desizer which is a concentrate of natural enzymes, with no trace of harsh alkalis, acids, or destructive chemicals.

EXSIZE works quickly, gently, gives a soft elastic feel, uniform absorbency... a good "hand." And what's more a few cents' worth will desize hundreds of yards of cotton or cotton-mixed goods.

Why not have our Pabst Technical Man show you the advantages of this famous desizer right in your own mill... or use our laboratories for your tests? We'll be delighted to send free booklet on request.



Copy. 1946, Pabst Brewing Company, Milwaukee, Wisconsin.

### PABST SALES COMPANY

CHICAGO, ILLINOIS

Warehouses at Jersey City, and Textile Warehouse Company, Greenville, S. C.

KNITTING  
WEAVING  
YARNS

Sell Us Your Surplus Yarns

D. W. PEACH & Co.  
GASTONIA, N. C.



# SOUTHERN SOURCES OF SUPPLY

## FOR EQUIPMENT, PARTS, MATERIAL, SERVICE

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

**ACME MACHINE & TOOL CO.**, 2516 Wilkinson Blvd., Charlotte, N. C.

**ACME STEEL CO.**, 2838 Archer Ave., Chicago, Ill. Sou. Office and warehouse, 603 Stewart Ave., S. W., Atlanta, Ga. F. H. Webb, Dist. Mgr. Sou. Sales Reps.: C. A. Currell, 523 Clairmont Ave., Decatur, Ga. Phone Dearborn 6267; Marcus M. Brown, 1231 Lexington Ave. (Phone 8583), Charlotte, N. C.; William G. Polley, 937 Cherokee Lane, Signal Mountain, Tenn. Phone Chattanooga 8-2635; John C. Brill, 309 Magazine St., New Orleans, La., Phone Magnolia 5859. Warehouses at Atlanta, Ga., Greenville, S. C., New Orleans, La.

**AKRON BELTING CO., THE**, Akron, O. Sou. Reps.: Ralph Gossett and Wm. J. Moore, 15 Augusta St., Greenville, S. C.; The Akron Belting Co., 406 S. 2nd St., Memphis, Tenn.; Oliver D. Landis, N. C. Agent, 718 Queens Rd., Charlotte 4, N. C.

**ALLEN CO., THE**, 440 River Road, New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

**AMERICAN CYANAMID & CHEMICAL CORP.**, 30 Rockefeller Plaza, New York City, Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C. Hugh Puckett, Sou. Sales Mgr. Reps.: John D. Hunter, E. H. Driver, Paul F. Hadcock, Charlotte Office; E. J. Adams, 1404 S. 22nd St., Birmingham, Ala.; Jack B. Butten, 610 N. Mendenhall St., Greensboro, N. C.; O. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; K. E. Youngchild, 10 South St., Mobile, Ala.

**AMERICAN CYANAMID CO.**, Textile Resin Dept., Bound Brook, N. J. Sou. Reps.: J. E. Moore, Mgr., Walter Knoepfel, Repr., 3333 Wilkinson Blvd., Charlotte, N. C.

**AMERICAN MOISTENING CO.**, Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

**AMERICAN PAPER TUBE CO.**, Woonsocket, R. I. Sou. Office: 513 South Tryon St., Charlotte, N. C.; Jesse Hodges, Sou. Repr.

**AMERICAN VISCOS CO.**, 350 Fifth Ave., New York City, Sou. Office, Johnston Bldg., Charlotte, N. C.; Harry L. Dalton, Mgr.

**ARKANSAS CO., INC.**, P. O. Box 210, Newark, N. J. Sou. Repr.: Jasper M. Brown, 1204 Greenwood Cliff, Charlotte, N. C.

**ARMOUR & CO.**, Armour Soap Works, 1355 West 31st St., Chicago 9, Ill. Dist. Divisional Offices: Armour & Co., P. O. Box 2664, Birmingham, Ala.; Armour & Co., 1816 Liberty Life Bldg., Charlotte, N. C.; Armour & Co., Jacksonville, Fla.; Armour & Co., Room 601, Chesapeake & Ohio Bldg., Huntington, W. Va.

**ARMSTRONG CORK CO.**, Industrial Div., Textile Products Section, Lancaster, Pa. Sou. Office, 33 Norwood Place, Greenville, S. C.; J. V. Ashley, Sou. Dist. Mgr.

**ARNOLD, HOFFMAN & CO., INC.**, Providence, R. I. Sou. Headquarters, 2130 N. Tryon St., Charlotte, N. C.; W. Chester Cobb, Sou. Sales Mgr.; Walter T. Bunce, Plant Mgr., Phone 2-4073; Technical Service Men: Reid Tull, 116 W. Thomas St., Salisbury, N. C.; Phone 1497-J; W. L. Mills and Philip L. Lavie, 2130 N. Tryon St., Charlotte, N. C.; John H. Graham, P. O. Box 904, Greenville, S. C.; Phone 2922; John R. Brown, P. O. Box 749, Trussville, Ala.; Phone 127; Harry Green, 1440 2nd Ave., Columbus, Ga. Warehouse and Sou. Mfg. Plant, 2130 N. Tryon St., Charlotte, N. C.

**ASHWORTH BROS., INC.**, Charlotte, N. C. Sou. Offices, 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S. W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

**BAHNSON CO., THE**, 1061 S. Marshall St., Winston-Salem, N. C.; 886 Drewery St., Atlanta, Ga.

**BANCROFT BELTING CO.**, Boston, Mass. Warehouse and Sou. Distributor, Carolina Supply Co., Greenville, S. C.

**BARBER-COLMAN CO.**, Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C.; J. H. Spencer, Mgr.

**BARIUM REDUCTION CORP.**, S. Charleston, W. Va. Sou. Distributors: American Cyanamid & Chemical Corp.; F. H. Ross & Co., Charlotte, N. C.

**BARKLEY MACHINE WORKS**, Gastonia, N. C.

**BARNES TEXTILE ASSOCIATES, INC.**, 10 High St., Boston, Mass. Sou. Office, 318 Montgomery Bldg., Spartanburg, S. C.

**BECCO SALES CORP.**, Buffalo, N. Y. Sou. Reps.: J. D. Quern and D. S. Quern, 1930 Harris Road, Charlotte, N. C.

**BEST & CO., INC. EDWARD H.**, Boston, Mass. Sou. Rep.: W. C. Hames, 185 Pinecrest Ave., Decatur, Ga. Phone Dearborn 5974; Ralph Gossett, William J. Moore, 15 Augusta St., Greenville, S. C., Phone 150.

**BOND CO., CHAS.**, 617 Arch St., Philadelphia, Pa. Sou. Reps.: Harold C. Smith, Greenville, S. C.; J. Ernest Brecht, P. O. Box 2023, Atlanta 1, Ga.

**BORNE SCRYMSER CO.**, Works and Offices, 632 S. Front St., Elizabeth, N. J. Warehouse, 815 W. Morehead St., Charlotte, N. C. Sou. Mgr.: Russell C. Young; Repr.: John Ferguson, LaGrange, Ga.

**BROOKLYN PERFEX CORP.**, Brooklyn, N. Y. Sou. Repr.: John Batson, Box 841, Greenville, S. C.

**BROWN CO., THE DAVID**, Lawrence, Mass. Sou. Reps.: Greenville, S. C., Ralph Gossett and Wm. J. Moore; Griffin, Ga., Belton C. Plowden; Dallas, Tex., Russell A. Singleton Co., Inc.; Gastonia, N. C., Gastonia Mill Supply Co.; Spartanburg, S. C., Montgomery & Crawford.

**BURKART-SCHIER CHEMICAL CO.**, Chattanooga, Tenn. Plants: Chattanooga-Knoxville-Nashville: Sales and Service: C. A. Schier, A. S. Burkart, W. A. Bentel, W. J. Kelly, Jr., George S. McCarty, A. J. Kelly, D. H. Gunther, care of Burkart-Schier Chemical Co., Chattanooga, Tenn.; H. V. Wells, care of Burkart-Schier Chemical Co., Nashville, Tenn.; Lawrence Newman, care of Burkart-Schier Chemical Co., Knoxville, Tenn.; James A. Brittain, 3526 Cliff Road, Birmingham, Ala.; Nelson A. Fisher, 629 Hillside Ave., Glen Ellyn, Chicago, Ill.; Byrd Miller, Woodside Bldg., Greenville, S. C.

**BUTTERWORTH & SONS CO., H. W.**, Philadelphia, Pa. Sou. Rep.: J. H. Zahn, Johnston Bldg., Charlotte, N. C.

**CAROLINA REFRACTORIES CO.**, Hartsville, S. C.

**CARTER TRAVELER CO.**, Gastonia, N. C., Division of A. B. Carter, Inc., Gastonia, N. C. Sou. Rep.: R. D. Hughes Sales Co., 1812 S. Main St., Dallas, Tex.

**CHARLOTTE CHEMICAL LABORATORIES, INC.**, Charlotte, N. C. Peter S. Gilchrist, Jr., Rep.

**CHARLOTTE LEATHER BELTING CO.**, 314 E. 6th St., Charlotte, N. C. Sales Reps.: J. E. Beattie, P. O. Box 82, Greenville, S. C.; J. L. Harkey and P. L. Pindell, Charlotte Office.

**CIBA CO., INC.**, Greenwich and Morton Sts., New York City, Sou. Offices and Warehouses, Charlotte, N. C.

**CLINTON INDUSTRIES, INC.**, Clinton, Iowa, Sou. Reprs.: Luther Knowles, Box 127, Phone 2-2486, Charlotte, N. C.; Grady Gilbert, Box 342, Phone 3129, Concord, N. C.; Clinton Sales Co., Inc., Geo. B. Moore, Box 481, Phone 822, Spartanburg, S. C., and 900 Woodside Bldg., Phone 3713, Greenville, S. C.; Boyce L. Estes, Box 132, LaGrange, Ga. Stocks carried at Carolina Transfer & Storage Co., Charlotte, N. C.; Consolidated Brokerage Co., Greenville, S. C.; Bonded Service Warehouse, Atlanta, Ga.; Textile Products Distributing Co., Rock Hill, S. C.; Industrial Chemicals, Roanoke Rapids, N. C.

**CLOVERLEAF MFG. CO.**, Honesdale, Pa. Sou. Rep.: W. A. Kennedy, Dilworth Station, Charlotte, N. C.

**COLE MFG. CO., R. D.**, Newman, Ga.

**CORN PRODUCTS REFINING CO.**, 17 Battery Place, New York City, Corn Products Sales Co., Southeastern Bldg., Greensboro, N. C., W. Rouse Joyner, Mgr.; Corn Products Sales Co., Montgomery Bldg., Spartanburg, S. C.; Corn Products Sales Co., Woodside Bldg., Greenville, S. C.; J. Alden Simpson, Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bldg., Atlanta, Ga.; J. Cantey Alexander, Mgr.; Corn Products Sales Co., Comer Bldg., Birmingham, Ala.; L. Hawley Kelley, Mgr. Stocks carried at convenient points.

**CROMPTON & KNOWLES LOOM WORKS**, Worcester, Mass. Sou. Offices and Plant: 1505 Hutchinson Ave., Charlotte, N. C.

**CURTIS & MARBLE MACHINE CO.**, 72 Cambridge St., Worcester, Mass. Sou. Reps.: Greenville, S. C., 1000 Woodside Bldg., W. F. Woodward, Tel. 3336; Dallas, Tex., O. T. Daniels, care Textile Supply Co.; New York, N. Y., 200 Fifth Ave., F. C. Bryant.

**DARY RING TRAVELER CO.**, Taunton, Mass. Sou. Rep.: John E. Humphries, P. O. Box 843, Greenville, S. C.; John H. O'Neill, P. O. Box 720, Atlanta, Ga.; H. Reid Lockman, P. O. Box 515, Spartanburg, S. C.

**DAYTON RUBBER MFG. CO.**, Dayton, O. Textile Accessory Reps.: J. O. Cole, P. O. Box 846, Greenville, S. C.; Kenneth Karns, P. O. Box 846, Greenville, S. C.; Thomas W. Meighan, 1364 Middlesex Ave., N.E., Atlanta, Ga.; T. A. Sizemore, 525 Grove St., Salisbury, N. C.; O. E. Stevens, P. O. Box 1659, Charlotte, N. C.; R. D. Newton, 1503 Harbert Ave., Memphis, Tenn.; O. T. Voyles, 240 Spring St., N.W., Atlanta, Ga.; V. V. Cook, 528 10th Court, S., Birmingham, Ala.; W. E. Wayland, P. O. Box 241, Jacksonville Beach, Fla.; A. J. Zeller, 3800 Napoleon Ave., New Orleans, La.; J. M. Hubbard, Dist. Mgr., The Dayton Rubber Co., 240 Spring St., N.W., Atlanta, Ga. Sou. Jobbers: Greenville Textile Supply Co., Greenville Belting Co., Greenville, S. C.; Textile Mill Supply Co., Charlotte, N. C.; Odell Mill Supply Co., Greensboro, N. C.; Young & Vann Supply Co., Birmingham, Ala.; Industrial Supply, Inc., LaGrange, Ga.; Textile Supply Co., Dallas, Tex.

**DENISON MFG. CO., THE**, Plant and Sales Offices, Asheville, N. C. Sou. Service Rep.: L. C. Denison, P. O. Box 4072, Asheville, N. C.

**DODENHOFF CO., INC.**, W. D., Greenville, S. C.

**DRAPER CORPORATION**, Hopedale, Mass. Rhode Island Warp Stop Equipment Branch, Pawtucket, R. I. Sou. Offices and Warehouses, Spartanburg, S. C., Clare H. Draper, Jr.; Atlanta, Ga., 242 Forsyth St., S.W., W. M. Mitchell.

**DU PONT DE NEMOURS & CO., INC.**, E. I., Electrochemicals Dept., Main Office, Wilmington, Del.; Charlotte Office, 414 S. Church St., LeRoy Kennette, Dist. Sales Mgr. Reps.: J. L. Moore, Technical Man; N. P. Arnold, 2386 Alston Dr., Atlanta, Ga., Technical Service Man; O. S. McCullers, 208 McPherson Lane, Greenville, S. C., Tech. Rep.

**EATON, PAUL B.**, 218 Johnston Bldg., Charlotte, N. C.

**EMMONS LOOM HARNESS CO.**, Lawrence, Mass. Sou. Plant, 118½ W. Fourth St., Charlotte, N. C.; George A. Field, Mgr.; Clifton E. Watson, Mgr. Sou. Sales, Arthur W. Harris, Harris Mfg. Co., Agt., P. O. Box 1982, Phone Main 2643, Atlanta, Ga.; R. D. Hughes Sales Co., 1812 Main St., Dallas 1, Tex.

**ENGINEERING SALES CO.**, 217 Builders' Bldg., Charlotte, N. C., and Allen Bldg., Greenville, S. C.; S. R. and V. G. Brookshire.

**FAFNR BEARING CO.**, New Britain, Conn. District Warehouse, 248 Spring St., N.W., Atlanta, Ga. A. G. Loughbridge, Ga. and Ala. Rep.; Stanley D. Berg, 321 N. Caswell Rd., Charlotte, N. C. Carolinas Rep.

**FIDELITY MACHINE CO.**, 3908-18 Frankford Ave., Philadelphia, Pa. Sou. Rep.: R. C. Aycock, 911 Provident Bldg., Chattanooga, Tenn.

**FOSTER MACHINE CO.**, Westfield, Mass. Sou. Offices, 509 Johnston Bldg., Charlotte, N. C.

**FRANKLIN PROCESS CO.**, Providence, R. I. Sou. Plants, Southern Franklin Process Co., Greenville, S. C.; Central Franklin Process Co., Chattanooga, Tenn.

**GASTONIA BRUSH CO.**, Gastonia, N. C.

**GASTONIA ROLLER, FLYER & SPINDLE CO.**, 1337 W. Second Ave., Gastonia, N. C.; C. E. Honeycutt.

**GATES RUBBER CO.**, Denver 17, Colo. Sales Offices and Warehouses at 605 W. Fifth St., Charlotte, N. C.; 801-2 Liberty National Life Bldg., Birmingham, Ala.; 110 Milby St., Houston, Tex.; 1710 N. Market St., Dallas, Tex. Sales Office at 521-523 C. & S. National Bank Bldg., Atlanta, Ga.



## Edward Parkinson Mfg. Co., Inc.

387 CHARLES ST. • PROVIDENCE 4, R. I.

### TEXTILE MACHINERY DIVISION

TENTER CHAINS, NEW AND REPAIR  
PARTS FOR FINISHING MACHINES  
DRYING MACHINE PARTS  
ELECTRIC GUIDERS AND PARTS  
STEEL, BRASS AND RUBBER IMMERSION ROLLS  
RUBBER NIP AND SQUEEZER ROLLS

### MILL AND TEXTILE SUPPLY DIVISION

*Specializing in*

BURLING IRONS	BURLING NIPPERS
WEAVERS' COMBS	FILLING FORKS
REED HOOKS	FORMED WIRE GOODS
METAL STAMPINGS AND SPECIALTIES	

## Beautiful Landscapes

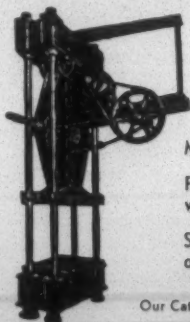
around your Living and Working places pay dividends.



Beautiful Silver Anniversary  
Catalog of Shrubbery, Roses,  
Evergreens and Fruit Trees  
from one of the South's  
Leading Nurseries will be  
sent on request.



**THE HOWARD-HICKORY CO.**  
DEPARTMENT T                      HICKORY, N. C.

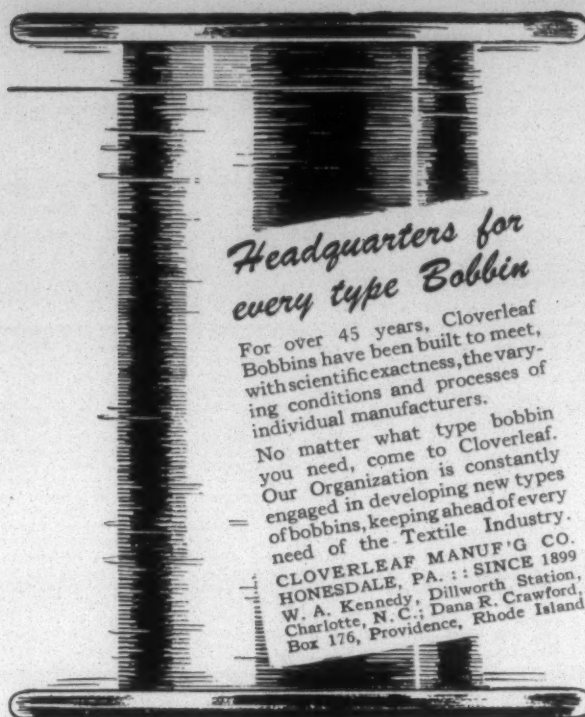


## Baling Press

Motor Drive, Silent Chain, Center of Screw.  
Push Button Control — Reversing Switch  
with limit stops up and down.  
Self Contained. Set anywhere you can run  
a wire.

Our Catalogue sent on request will tell you more about them

**DUNNING & BOSCHERT PRESS CO., Inc.**  
328 West Water Street                      SYRACUSE, N. Y.



*Headquarters for  
every type Bobbin*

For over 45 years, Cloverleaf  
Bobbins have been built to meet,  
with scientific exactness, the vary-  
ing conditions and processes of  
individual manufacturers.

No matter what type bobbin  
you need, come to Cloverleaf.  
Our Organization is constantly  
engaged in developing new types  
of bobbins, keeping ahead of every  
need of the Textile Industry.  
CLOVERLEAF MANUF'G CO.  
HONESDALE, PA. :: SINCE 1899  
W. A. Kennedy, Dillworth Station,  
Charlotte, N. C.; Dana R. Crawford,  
Box 176, Providence, Rhode Island

# CLOVERLEAF Bobbins . . . . .

American Housewives Remember these  
**4 QUALITY BRANDS**



**UTICA & MOHAWK COTTON MILLS, INC.**  
Mills: Utica Division, Utica, N. Y.  
Bleachery: Chadwicks, N. Y.



**GENERAL CHEMICAL CO.**, 40 Rector St., New York, N. Y. Sou. Sales and Technical Service Offices: 45 Edgewood Ave., S.E., Atlanta, Ga.; 2000 Race St., Baltimore 30, Md.; 818 Tuckasee Rd., P. O. Box 970, Charlotte 1, N. C.; 3909 Capitol Ave., Houston 3, Tex.

**GENERAL COAL CO.**, 1217 Johnston Bldg., Charlotte, N. C. J. W. Lassiter, Sou. Sales Mgr. Repr.: H. G. Thompson, 21 Sylvan Ave., Asheville, N. C.; Guy H. Sowards, 2011 Fairview Road, Raleigh, N. C.; Hugh D. Brower, 2715 Lenox Road, Atlanta, Ga.; W. A. Counts, Res. Mgr., Law and Commerce Bldg., Bluefield, W. Va.; Dave B. Smith, Charlotte, N. C. Combustion Engineer, E. H. Chapman, Charlotte, N. C.

**GENERAL DYESTUFF CORP.**, 435 Hudson St., New York City. Sou. Office and Warehouse, 2459 Wilkinson Blvd., Charlotte, N. C., S. H. Williams, Mgr.

**GILL LEATHER CO.**, Salem, Mass. Sou. Repr.: Belton C. Plowden, Griffin, Ga., Tel. 3157; Mrs. W. G. Hamner, Gastonia, N. C., Tel. 229; Ralph Gossett, 15 Augusta St., Greenville, S. C., Tel. 150; Wm. J. Moore, P. O. Box 1523, Greenville, S. C., Tel. 150.

**GOSSETT MACHINE WORKS**, W. Franklin Ave., Gastonia, N. C.

**GRATON & KNIGHT CO.**, Worcester 4, Mass. Sou. Repr.: D. A. Ahlstrand, S. E. Dist. Mgr., P. O. Box 4028, Atlanta, Ga.; W. F. McNulty, 1240 Romany Road, Charlotte 3, N. C., Phone 3-9573; F. W. Tisdell, P. O. Box 4028, Atlanta, Ga., Phone; P. T. Pinckney, Jr., Route 2, Germantown, Tenn., Phone 9. Sou. Distributors: Hugh Black, Woodside Bldg. Annex, Greenville, S. C.; The Cameron & Barkley Co., 150 Meeting St., Charleston, S. C.; Columbus Iron Works Co., 901 Front St., Columbus, Ga.; The Textile Mill Supply Co., 1309 S. Mint St., Charlotte, N. C.; Arkansas Mill Supply Co., Inc., Fourth and Louisiana Sts., Pine Bluff, Ark.; Buhrman-Pharr Hardware Co., Texarkana, Ark.; Keith-Stimmons Co., Inc., Cummins Station, Nashville, Tenn.; McGowin-Lyons Hardware & Supply Co., 113-125 N. Water St., Mobile, Ala.; Henry A. Petter Supply Co., 101-214 S. First St., Paducah, Ky.; Southern Supply Co., E. Orleans St., Jackson, Tenn.; Lewis Supply Co., Helena, Ark.; Standard Supply & Hardware Co., 822 Tchoupitoulas St., New Orleans, La.; Weeks Supply Co., Fourth and Jefferson Sts., Monroe, La.; Battery Machinery Co., 100-120 N. Second Ave., Rome, Ga.; The Cameron & Barkley Co., 605 E. Forsyth St., Jacksonville, Fla.; The Cameron & Barkley Co., 6107 S. Franklin St., Tampa, Fla.; Fulton Supply Co., 342 Nelson St., Atlanta, Ga.; Sharp Battery & Electric Co., Broad and Fourth St., Chattanooga, Tenn.; Tennessee Mill & Mine Supply Co., 406-12 State St., Knoxville, Tenn.; The Young & Vann Supply Co., 1725 First Ave., Birmingham, Ala.; Lewis Supply Co., 477 S. Main St., Memphis, Tenn.

**GREENSBORO LOOM REED CO.**, Greensboro, N. C. Phone 5678. Geo. A. McFetters, Mgr., Phone 3-0205; W. P. (Bill) Anderson.

**GREENVILLE BELTING CO.**, Greenville, S. C.

**GREENVILLE TEXTILE SUPPLY CO.**, Greenville, S. C.

**GRINNELL CO., INC.**, Providence, R. I. Sou. Plants: 1431 W. Morehead St., Charlotte 1, N. C.; 240 N. Highland Ave., N.E., Atlanta 2, Ga.

**GULF OIL CORPORATION OF PA.**, Pittsburgh, Pa. Division Offices: Atlanta, Ga. A. M. Wright, Greenville, S. C.; W. G. Robertson, Jr., Spartanburg, S. C.; J. H. Hooten, Gastonia, N. C.; R. G. Burkhalter, Charlotte, N. C.; G. P. King, Jr., Augusta, Ga.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, O.

**H & B AMERICAN MACHINE CO.**, Pawtucket, R. I. Sou. Offices, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga. J. C. Martin, Asst.; Johnston Bldg., Charlotte, N. C.; Elmer J. McVey, Mgr.; Fritz Swifell, Fred Dickinson, Jim Miller, Sales and Service Representatives.

**HENLEY PAPER CO.** (formerly Parker Paper Co.) Headquarters and Main Warehouse, High Point, N. C.; Warehouses and Sales Divisions: Charlotte, N. C., Asheville, N. C., Gastonia, N. C.

**HERSEY, HENRY H.**, 44 Norwood Place, Greenville, S. C. Selling Agent for A. C. Lawrence Leather Co. and New England Bobbin & Shuttle Co.

**HETHERINGTON & SONS, INC.**, 72 Lincoln St., Boston 11, Mass. Sou. Rep.: Thomas M. Brockman, Jr., 236 W. Airline Ave., Gastonia, N. C.

**HOUGHTON & CO., E. F.**, 303 W. Lehigh Ave., Philadelphia 33, Pa. Sou. Repr.: W. H. Brinkley, Gen. Sales Mgr., Sou. Div. 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916. Sou. Repr.: L. L. Brooks, 23 Jones Ave., Greenville, S. C., Tel. 4856-J; J. W. Byrnes, 701 N. San Jacinto St., Houston 2, Tex., Tel. Jackson 2-7443; G. J. Reese, 315 St. Charles St., New Orleans, La.; C. L. Elgert, 300 Chesapeake Bank Bldg., 7 St. Paul St., Baltimore, Md., Tel. Saratoga 2388; T. E. Hansen, Rt. No. 2, Box 398, Glen Allen, Va., Tel. 5-1620; J. J. Reilly, 2788 Peachtree Rd., N. E., Apt. 6-B, Atlanta, Ga., Tel. Cherokee 7660; V. C. Shadden, P. O. Box 935, Chattanooga, Tenn.; O. G. Schultze, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916; S. P. Schwoyer, P. O. Box 1507, or 302½ Otteray Drive, High Point, N. C., Tel. 3654; J. C. Mahaffey, Warp Size Specialist, 1301 W. Morehead St., Charlotte, N. C.; W. C. McMann, 1301 W. Morehead St., Charlotte, N. C., Tel. 3-2916; W. A. Isenberg, Lubrication Engineer, 1301 W. Morehead St., Charlotte, N. C.; G. J. Reese, 701 N. Jacinto St., Houston 2, Tex.

**HOUGHTON WOOL CO., THE**, 258 Summer St., Phone Liberty 1875, Boston, Mass. Sou. Rep.: Jas. E. Taylor, P. O. Box 2084, Phone 3-3692, Charlotte, N. C.

**HOWARD BROS. MFG. CO.**, 44-46 Vine St., Worcester, Mass. Sou. Offices and Plants, 244 Forsyth St., S.W., Atlanta, Ga.; Guy L. Melchor, Sou. Agent; J. Floyd Childs, 219-223 S. Linwood St., Gastonia, N. C.; Carl M. Moore, Agent; Southwestern Rep.: Russell A. Singleton Co., Inc., 718 Brown Bldg., Austin, Tex.

**IDEAL MACHINE CO.**, Bessemer City, N. C.

**INDUSTRIAL COOLING & MOISTENING CO.**, 1440-44 S. Tryon St., Charlotte 3, N. C., G. A. White.

**INDUSTRIAL RAYON CORP.**, Cleveland, O. Sou. Repr.: J. H. Mason, P. O. Box 897, Greensboro, N. C.; W. L. Jackson, 900 Woodside Bldg., Greenville, S. C.

**INDUSTRIAL SUPPLY CO.**, Clinton, S. C.

**JACOBS MFG. CO., THE E. H.**, Danielson, Conn., and Charlotte, N. C. Sou. Executive, W. Irving Bullard, Pres., Charlotte, N. C.; Sou. Sales Mgr., S. B. Henderson, P. O. Box 133, Greer, S. C.; Sou. Rep.: William P. Russell, Box 778, Atlanta, Ga.; Sou. Subsidiary, The E. H. Jacobs Mfg. Corp., Box 3096, Charlotte, N. C. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Charlotte Supply Co., Charlotte, N. C.; Gastonia Mill Supply Co., Gastonia, N. C.; Shelby Supply Co., Shelby, N. C.; Sullivan Hardware Co., Anderson, S. C.; Montgomery & Crawford, Inc., Spartanburg, S. C.; Carolina Supply Co., Greenville, S. C.; Greenville Textile Supply Co., Greenville, S. C.; Fulton Supply Co., Atlanta, Ga.; Southern Belting Co., Greenville, S. C.; Southern Belting Co., Atlanta, Ga.; The Young & Vann Supply Co., Birmingham, Ala.

**JARRETT & CO., CECIL H.**, P. O. Box 647, Newton, N. C.

**JENKINS METAL SHOP**, Gastonia, N. C.

**JOHNSON CHEMICAL CO.**, Statesville Ave., Phone 6450, Charlotte, N. C., P. O. Box 1418. Stephen J. Hawes, Staton P. Peel, Jr.

**KEARNY MFG. CO., INC.**, Kearny, N. J. (Hygrolit), Sou. Plant and Office, Greenville, S. C. W. O. Silmbach, Mgr. Sou. Repr.: Harold Mahon, Greensboro, N. C.; Wm. F. Russell, Atlanta, Ga.

**KEEVER STARCH CO.**, Columbus, O. Sou. Office, 1200 Woodside Bldg., Greenville, S. C.; Claude B. Iler, Sou. Mgr. Sou. Warehouses: Greenville, S. C., Charlotte, N. C. Sou. Repr.: C. C. Switzer, Greenville, S. C.; Luke J. Castile, 924 Monticello Terrace, Charlotte, N. C.; F. M. Wallace, Homewood, Birmingham, Ala.

**KEYSTONE BELTING CO.**, 213 N. Third St., Philadelphia, Pa. Sou. Rep.: T. J. Digby, Jr., P. O. Box 244, Greer, S. C.

**LAMBETH ROPE CORP.**, New Bedford, Mass. Frank Burke, Phone 3-4287, Charlotte, N. C.; J. P. O'Leary, Phone 4082-M, Greenville, S. C.

**LANDIS, OLIVER D.**, 718 Queens Road, Charlotte 4, N. C.

**LAUREL SOAP MFG. CO., INC.**, 2607 E. Tioga St., Philadelphia, Pa. Sou. Repr.: A. Henry Gaede, P. O. Box 1083, Charlotte, N. C.; W. R. Sargent, P. O. Box 1044, Greenville, S. C.

**LAWRENCE LEATHER CO., A. C.**, Peabody, Mass. Henry W. Hersey, Selling Agent, 444 Norwood Place, Greenville, S. C.

**LOFER CO., RALPH E.**, 500 Woodside Bldg., Greenville, S. C. New England Office, Buntington Bldg., Fall River, Mass.

**C. E. LUTTRELL & CO.**, Greenville, S. C.

**MACQUIRE & CO., JOHN F.**, 370 Fourth Ave., New York City. Sou. Rep.: Taylor R. Durham, Liberty Life Bldg., Charlotte, N. C.

**MANHATTAN RUBBER MFG. DIVISION OF RAYBESTOS-MANHATTAN, INC.**, THE, Passaic, N. J. Factory: North Charleston, S. C.

**MARQUETTE METAL PRODUCTS CO.**, Cleveland, O. Sou. Rep.: Byrd Miller, Woodside Bldg., Greenville, S. C.

**MATHESON ALKALI WORKS, INC., THE**, 60 E. 42nd St., New York City. Southeastern Dist. Sales Office: Liberty Life Bldg., Charlotte, N. C.; Fred O. Tilson, Sou. Dist. Sales Mgr. Repr.: R. C. Staples, Z. N. Holler, Frank Thomas, John Staples, Vernon Woodside, Harold Dinges.

**MEADOWS MFG. CO.**, P. O. Box 4354, Atlanta, Ga.

**MERROW MACHINE CO., THE**, 8 Laurel St., Hartford, Conn. Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.

**MILL DEVICES CO.**, Gastonia, N. C. R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex., Texas and Arkansas; Eastern Rep. (including Canada), C. E. Herrick, 44 Franklin St., Providence, R. I.; European Rep.: Mellor, Bromley & Co., Ltd., Leicester, England.

**MILLER, BYRD**, Manufacturers' Agent, Woodside Bldg., Greenville, S. C.

**MONSANTO CHEMICAL CO.**, St. Louis 4, Mo. G. Y. Frankie, Gen. Branch Mgr., Brown Marx Bldg., Birmingham 3, Ala.; J. B. Trotter, Johnston Bldg., Charlotte 2, N. C.

**NATIONAL ANILINE DIVISION**, Allied Chemical & Dye Corp., Gen. Office, 40 Rector St., New York City. Julian T. Chase, Res. Mgr., Kenneth Mackenzie, Asst. to Res. Mgr., 201 W. First St., Charlotte, N. C. Salesmen: Wyas L. Barker, Harry L. Shinn, Geo. A. Artope and J. Reese Daniel, 201 W. First St., Charlotte, N. C.; J. H. Shuford, C. J. Dulin and J. A. Parker, Jefferson Standard Bldg., Greensboro, N. C.; H. A. Rodgers and Chas. A. Spratt, 1202 James Bldg., Chattanooga 2, Tenn.; James I. White, American Savings Bank Bldg., Atlanta, Ga.; W. H. Jackson, Country Club Apts., Columbus, Ga.; A. Jones, 508 Cotton Exchange Bldg., New Orleans, La.

**NATIONAL RING TRAVELER CO.**, 354 Pine St., Pawtucket, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Sou. Agt., L. E. Taylor, Charlotte, N. C. Sou. Repr.: Otto Pratt, Union Mills, N. C.; H. B. Askew, P. O. Box 221, Griffin, Ga.; J. Fred Sumner, Mt. Holly, N. C.

**NEW ENGLAND BOBBIN & SHUTTLE CO.**, Nashua, N. H. Sou. Repr.: Charlotte Supply Co., Charlotte, N. C.; Mrs. W. G. Hamner, Box 26, Gastonia, N. C.; Arthur W. Harris, 443 Stonewall St., S.W., Atlanta, Ga.; Henry H. Hersey, Norwood Place, Greenville, S. C.

**N. Y. & N. J. LUBRICANT CO.**, 292 Madison Ave., New York City. Sou. Office, 1000 W. Morehead St., Phone 3-7191, Charlotte, N. C., Spartanburg, S. C., Atlanta, Ga., Greenville, S. C. Falls L. Thomason, Sou. Dist. Mgr.

**NOBLE, ROY**, New Bedford, Mass. Sou. Rep.: John P. Batson, P. O. Box 841, Greenville, S. C.

**NORLANDER-YOUNG MACHINE CO.**, New Bedford, Mass. Sou. Plant, York Road, Gastonia, N. C.

**OCELL MILL SUPPLY CO.**, Greensboro, N. C.

**ONYX OIL & CHEMICAL CO.**, 15 Exchange Place, Jersey City 2, N. J. Sou. Sales and Service: E. W. Klumph, Cliff Myers, Thomas Wilheit, Charlotte, N. C.

**PABST SALES CO.**, 221 N. LaSalle St., Chicago 1, Ill. Sou. Repr.: C. H. Patrick, P. O. Box 300, Salisbury, N. C., Phone 1066. Sou. Warehouse, Textile Warehouse Co., Greenville, S. C.

**PAGE BELTING CO., INC.**, P. O. Box 482, Concord, N. H. Sou. Repr.: William M. Virgin, 3410 Alta Vista Dr., Chattanooga, Tenn., Phone 2-9457. Special Repr.: L. Robert B. Rowland, P. O. Box 1313, Greenville, S. C., Phone 1302. Distributors: Dillon Supply Co., 5 West St., Raleigh, N. C.; Dillon Supply Co., Church St., Durham, N. C.; Dillon Supply Co., 5 Church St., Rocky Mount, N. C.; Dillon Supply Co., E. Mulberry St., Goldsboro, N. C.; Chattanooga Belting & Supply Co., 1221-1225 Market St., Chattanooga 1, Tenn.

**PARKS-CRAMER CO.**, Plants at Fitchburg, Mass., and Charlotte, N. C. Atlanta Office, Bona Allen Bldg.

**PAWTUCKET MFG. CO.**, Pawtucket, R. I. Sou. Distributor: Industrial Supply Co., Clinton, S. C.

**PEACH & CO., D. W.**, Gastonia, N. C. D. W. Peach.

**PEASE & Co.**, 119½ E. Fifth St., Charlotte, N. C.

**PENICK & FORD, LTD., INC.**, 430 Lexington Ave., New York City; Cedar Rapids, Iowa. P. G. Wear, Sou. Sales Mgr., 805 Bona Allen Bldg., Atlanta, Ga.; J. H. Almand, W. J. Kirby, Atlanta Office; C. T. Lassiter, Greensboro, N. C.; Guy L. Morrison, 902 Montgomery Bldg., Spartanburg, S. C. Stocks carried at convenient points.

**PIEDMONT PROCESSING CO.**, Belmont, N. C.



# MI-CLEANSER

EST. 1916  
TEXTILE  
MILL



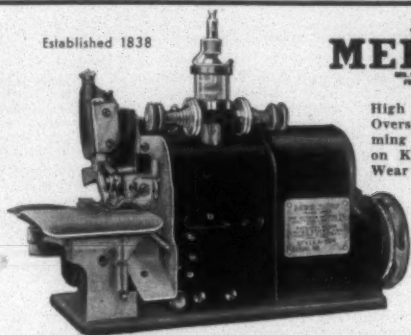
SCRUBBING  
POWDER

CLEAN, WHITE, SAFE FLOORS

MI-CLEANSER IS AVAILABLE IN ABRASIVE  
OR SOLUABLE GRADES — ALL IDEAL FOR  
HAND AND MACHINE SCRUBBING.  
IMMEDIATE SHIPMENT

THE DENISON MANUFACTURING COMPANY  
ASHEVILLE, N. C.

Established 1838



TRADE MARK  
**MERROW**  
U.S. & PAT. OFF. REG. IN  
FOREIGN COUNTRIES

High Speed Overedging,  
Overseaming and Hem-  
ming Machines for Use  
on Knitted and Woven  
Wear of All Kinds.

Quality Results  
— High Produc-  
tion — Conven-  
ient Handling —  
Minimum Time  
Out for Adjust-  
ment and Re-  
pair — Low Up-  
keep Costs.

For Best Results Use a Machine Suitably Arranged for Your Work.

**The MERROW MACHINE COMPANY**

2802 Laurel Street

Distributors

Hartford 6, Conn.

Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.



**LONGER  
LASTING  
BOILER  
FURNACES**

"Boiler furnaces lined with CARECO  
last two to four times longer than  
those lined with fire brick. Write for  
quotation."

CAROLINA REFRACTORIES CO.  
Hartsville, S. C.



**Leather Belting**  
all types

CHECK (domestic) STRAPS

Goodrich Mechanical Rubber Goods

**KEYSTONE BELTING COMPANY**

213 NORTH THIRD STREET, PHILADELPHIA, PENNSYLVANIA

Southern Representative

T. J. DIGBY, JR. • BOX 244 • PHONE 159-W • GREER, S. C.

## OSAGE MANUFACTURING COMPANY

BESSEMER CITY, N. C.



*Manufacturers of*

Combed and Carded 8.2  
Army Twills, 9 ounce  
Combed Army Sateens and  
6 ounce Carded Shirtings



*Selling Agents*

REEVES BROTHERS, INC.

54 WORTH ST. + NEW YORK CITY

## ESMOND VIRGINIA, INC.

Waynesboro, Virginia

and

Bluefield, West Virginia



*Manufacturers of*

**FINE CRIB BLANKETS**



**PITTSBURGH PLATE GLASS CO.**, Columbia Chemical Div., Grant Bldg., Pittsburgh, Pa. Dist. Sales Office, 615 Johnston Bldg., Charlotte, N. C.; James R. Simpson, Dist. Sales Mgr.

**PROVIDENT LIFE & ACCIDENT INS. CO.** (Group Accident and Health and Welfare Plans Div.), Chattanooga, Tenn. Southeastern Div. Office, 815 Commercial Bank Bldg., Gastonia, N. C.

**RADIO CORP. OF AMERICA**, Atlanta, Ga. Distributor for North and South Carolina: Southern Radio Corp., 1201 W. Morehead St., Charlotte, N. C. Distributor for Georgia, Alabama and Tennessee: The Yancey Co., Inc., 340 Peachtree St., N.W., Atlanta 3, Ga.

**RAILWAY SUPPLY & MFG. CO.**, THE, Main Office: 335-37 W. Fifth St., Cincinnati 1, O. Tel. Cherry 7830; Atlanta Office: Erwin Worstman, 888 Marietta St., Atlanta 1, Ga. Tel. Hemlock 1677; Charlotte Office: G. C. Tate and John Vogler, P. O. Box 1088, Charlotte 1, N. C. Tel. 4-1626; Dallas Office: D. F. McKinnon, 3200 Main St., Dallas, Tex., Tel. Central 6415.

**RAY CHEMICAL CO.**, Charlotte, N. C. Sou. Reprs.: Thomas J. Hall, Thomas H. McKenzie, Harry H. Sims, William W. Ray.

**RHOADS & SONS, J. E.**, 35 N. Sixth St., Philadelphia 6, Pa. Sou. Office: J. E. Rhoads & Sons, 88 Forsyth St., S.W., Atlanta, Ga., P. O. Box 4305, C. R. Mitchell, Mgr. Sou. Reprs.: J. Warren Mitchell, P. O. Box 1589, Greenville, S. C.; A. S. Jay, P. O. Box 687, Sylacauga, Ala.; J. T. Hoffman, P. O. Box 4305, Atlanta, Ga.; L. H. Schwoebel, 615 Roslyn Road, Winston-Salem, N. C.; Textile Supply Co., 301 N. Market St., Dallas, Tex.

**RICE DOBBY CHAIN CO.**, Millbury, Mass. Sou. Reprs.: John P. Batson, P. O. Box 1055, Greenville, S. C.; R. E. L. Holt, Jr., P. O. Box 1474, Greensboro, N. C.

**ROHM & HAAS CO.**, 222 W. Washington Square, Philadelphia, Pa. Sou. Office: P. H. Del Plaine, Dist. Mgr., 1109 Independence Bldg., Charlotte, N. C., Phone 2-3201; A. K. Haynes, 1811 Meadowdale Ave., N.E., Atlanta, Ga., Phone Atwood 2619.

**ROY & SON CO., B. S.**, Worcester, Mass. Sou. Office, Box 1045, Greenville, S. C.; Jack Roy, Rep. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Textile Supply Co., Dallas, Tex.

**SACO-LOWELL SHOPS**, 60 Battery March St., Boston, Mass. Sou. Office and Supply Depot, Charlotte, N. C.; Walter W. Gayle, Sou. Agt., P. Robbins Lowe and Charles S. Smart, Jr., Selling Agts., Atlanta, Ga.; John L. Graes, Mgr., and Miles A. Comer, Selling Agt.; Greenville, S. C.; H. P. Worth, Selling Agt.

**SCOTT TESTERS, INC.**, 115 Blackstone St., Providence, R. I. Sou. Reprs.: John Kilnick, 304 Forest Ave., Augusta, Ga.

**SEYDEL-WOOLLEY & CO.**, 748 Rice St., N.W., Atlanta, Ga. Reprs.: Vasser Woolley, John R. Seydel, E. A. Scott, A. Pate, Atlanta, Ga.; W. L. Whelanant, Concord, N. C. Northern and Export Rep.: Standard Mill Supply Co., 1094-1090 Main St., Pawtucket, R. I. (conditioning machinery and Penetrants only). Southwestern Reprs.: O. T. Daniel, Textile Supply Co., 301 N. Market St., Dallas, Tex.

**SHELL OIL CO., INC.**, 50 W. 50th St., New York 20, N. Y. Div. Office Headquarters: 909 E. 22nd St., Baltimore 18, Md.; B. O. Symon, Mgr., Lubricants Dept., 50 W. 50th St., New York 20, N. Y.; Jay Trexler, Mgr. Industrial Products, Shell Oil Co., Inc., 909 E. 22nd St., Baltimore 18, Md., Phone University 4890; L. A. Gregg, Industrial Rep., 2010 Charlotte Drive, Charlotte 3, N. C.; C. C. Hurst, Dist. Mgr. Shell Oil Co., Inc., 613 S. Calvert St., Charlotte, N. C.; C. C. Hurst, Dist. Mgr. Shell Oil Co., Inc., Spring Garden St., Ext., Greensboro, N. C.; P. R. Phenix, Dist. Mgr. Shell Oil Co., Inc., Pinckney Court, Spartanburg, S. C.; J. C. Metz, Dist. Mgr., Shell Oil Co., Inc., 700 Blossom St., Columbia, S. C.; Div. Offices: 400 William-Oliver Bldg., Atlanta 3, Ga.; E. R. Boswell, Mgr. Industrial Products, Office and Bulk Depots: Atlanta, Ga.; Birmingham, Ala.; Chattanooga, Tenn.; Houston, Tex.; Jackson, Miss.; Jacksonville, Fla.; Knoxville, Tenn.; Macon, Ga.; Montgomery, Ala.; Nashville, Tenn.; New Orleans, La.

**SIMMONS PLATING WORKS**, 219 Prior St., S.W., Atlanta 3, Ga.

**SINCLAIR REFINING CO.**, Dist. Office, 573 W. Peachtree St., Atlanta, Ga.; F. W. Schwetmann, Mgr., Lubricating Sales; G. C. Wilson, Mgr., Industrial Oil Sales. State Offices: Atlanta, Ga.; Birmingham, Ala.; Jacksonville, Fla.; Columbia, S. C.; Charlotte, N. C.; Nashville, Tenn.; Jackson, Miss. Industrial Lubricating Engineers: C. C. Nix, P. O. Box 2111, Birmingham 1, Ala.; C. O. Penn, P. O. Box 2090, Jackson, Miss.; L. M. Kay, 332 8th St., N.E., Atlanta, Ga.; G. R. Dyer, P. O. Box 1710, Atlanta 1, Ga.; R. L. Parrish, 211 Claire Drive, Thomasville, Ga.; A. F. Landers, P. O. Box 1685, Lakeland, Fla.; R. R. Boatright, P. O. Box 4009, Jacksonville 1, Fla.; W. A. Edmundson, 124 143rd Ave. St. Petersburg 6, Fla.; W. H. Lipscomb, 31 Pinkney St., Greenville, S. C.; M. K. Williams, 135 Shelbourne Rd., Asheville, N. C.; J. O. Holt, P. O. Box 5516, State College Station, Raleigh, N. C.; R. A. Smith, P. O. Box 1366, Knoxville, Tenn.; H. S. Fite, P. O. Box 299, Nashville 2, Tenn.

**SIRRIE & CO., J. E.**, Greenville, S. C.

**SLAUGHTER MACHINERY CO.**, 513 S. Tryon St., Charlotte, N. C.

**SLIP-NOT BELTING CORP.**, Kingsport, Tenn. Sou. Reprs.: E. S. Meservy, 134 McClean St., Decatur, Ga.; Ga. and Ala. Rep.: G. H. Spencer, P. O. Box 1297, Gastonia, N. C.; N. C. Rep.: Jack Alexander, Box 1623, Phone 7777, Charlotte, N. C.; part of N. C. and S. C. Rep.: T. E. Doane, 1421 W. Sullivan St., Kingsport, Tenn.; Tenn. and Va. Rep.: J. D. Cox, V-Pres., Greenville Hotel, Greenville, S. C., and Kingsport, Tenn.; O. L. ("Blackie") Carter, Box 2206, Phone 2043, Greenville, S. C.

**SOCONY-VACUUM OIL CO., INC.**, Southeastern Div. Office, 1602 Baltimore Trust Bldg., Baltimore, Md. Warehouses: Union Storage Co., 224 W. 1st St., Charlotte, N. C.; Textile Warehouse Co., 511 Rhett St., Greenville, S. C.; South Atlantic Bonded Warehouse Co., Greensboro, N. C.; Columbia Warehouse & Truck Terminal, 903 Pulaaki St., Columbia, S. C.; Tennessee District Office: Third National Bank Bldg., Nashville 3, Tenn.; Warehouses: Knoxville, Tenn.; Chattanooga, Tenn.; Nashville, Tenn.; Columbia, Tenn.; Memphis, Tenn.; Johnson City, Tenn.

**SOLVAY SALES CORP.**, 40 Rector St., New York City. Sou. Branches: 212 S. Tryon St., Charlotte, N. C.; H. O. Pierce, Mgr. Sou. Reprs.: Earl H. Walker, Guilford College, N. C.; H. W. Causey, 215 Middleton Drive, Charlotte, N. C.; M. W. Fletcher, 2973 Hardman Court, Atlanta, Ga.

**SONOCO PRODUCTS CO.**, Hartsville, S. C.

**SOUTHERN BELTING CO.**, 236-8 Forsyth St., S.W., Atlanta, Ga. Sou. Reprs.: A. P. Mauldin, 1376 Graham St., S.W., Atlanta, Ga.; E. G. Merritt, 549 Peachtree Battle Ave., Atlanta, Ga.; J. J. Merritt, 1428 Peachtree St., N.E., Atlanta, Ga.; J. H. Riley, 3013 Monroe St., Columbia, S. C.; S. C. Smith, 2526 Delwood Drive, N. W., Atlanta, Ga.

**SOUTHERN LOOM REED MFG. CO., INC.**, Gaffney, S. C.

**SOUTHERN SPINDLE & FLYER CO.**, Charlotte, N. C.

**SOUTHERN STANDARD MILL SUPPLY CO.**, 512-514 W. Fourth St., Charlotte, N. C. Benson Davis, Mgr.

**STALEY MFG. CO., A. E.**, Decatur, Ill. Sou. Offices, 2000 Rhodes-Haverty Bldg., Atlanta, Ga. Wm. H. Randolph, Jr., Southeastern Mgr.; L. A. Dillon, Asst. Southeastern Mgr. Sou. Reprs.: George A. Dean, H. A. Mitchell, Montgomery Bldg., Spartanburg, S. C.; W. T. O'Steen, Greenville, S. C.; H. F. Taylor, Jr., P. O. Box 1303, Charlotte, N. C.; W. N. Dulaney, 12 Montevallo Lane, Birmingham, Ala.

**STANLEY WORKS, THE**, New Britain, Conn. Sales Reprs.: A. Y. Bristol, 104 Maple Ave., Tel. Narberth 3795, Narberth, Pa.; G. R. Douglas, 707 Columbian Mutual Towers, Tel. 8-7117, Memphis, Tenn.; M. A. Hawkins, 3813 General Taylor St., Tel. Upton 6057-J, New Orleans, La.; H. C. Jones and W. L. Cowart, care The Stanley Sales Co., 651 Humphries St., S.W., Tel. Main 4110, Atlanta, Ga.; W. D. Low, Fox Drive, Chattanooga, Tenn.; G. J. McLernan, 209 Hubbard St., San Antonio, Tex.; C. W. Lynch, 2814 Arcadia St., Charlotte, N. C.

**STEEL HEDDLE MFG. CO.**, Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Gulfport Bank Bldg., Box 1917, Greensboro, N. C.; C. W. Cain, Mgr.; Henry P. Godwin, Sales and Service, Greenville Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C.; J. J. Kaufmann, Jr., Asst. V-Pres. and Mgr. of Southern Divisions; Davis L. Batson and Sam Zimmerman, Jr., Sales and Service, Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga.; Vernon A. Graff, Mgr.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C.; J. J. Kaufmann, Jr., Mgr.; Louis P. Batson, Director of Sales.

**STEIN, HALL & CO., INC.**, 285 Madison Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C.; Ira L. Griffin, Mgr., W. N. Kline, 2500 Rosewell Ave., Charlotte, N. C.; E. D. Estes, 1257 Durand Dr., N.E., Atlanta, Ga.

**STERLING RING TRAVELER CO.**, 101 Lindsay St., Fall River, Mass. D. J. Quillen, Sou. Mgr., P. O. Box 443, Spartanburg, S. C.; D. C. Anderson, Sou. Rep., P. O. Box 629, Cedartown, Ga.

**TERRELL CO., THE**, Charlotte, N. C. E. A. Terrell, Pres. and Mgr.

**TEXAS CO., THE**, New York, N. Y. Dist. Offices, Box 901, Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk Plants and Warehouses in all principal cities. Lubrication Engineers: P. C. Bogart, Norfolk, Va.; D. L. Keys, 3 Brooklyn Sta., Baltimore, Md.; W. H. Boebel, Roanoke, Va.; F. M. Edwards, Goldsboro, N. C.; W. P. Warner and R. L. Scott, Greensboro, N. C.; B. D. Heath and C. W. Meador, Charlotte, N. C.; J. S. Leonard, Greenville, S. C.; F. G. Mitchell, Charleston, S. C.; L. C. Mitchum, Atlanta, Ga.; A. C. Keiser, Jr., Atlanta, Ga.; J. G. Myers, Birmingham, Ala.; P. H. Baker, textile engineer, New York, N. Y.

**TEXTILE APRON CO.**, East Point, Ga.

**TEXTILE SPECIALTY CO.**, Box 1297, Phone 2-2238, Greensboro, N. C. L. C. Atkinson, Greensboro, N. C.; F. A. Decker, 1119 Dilworth Rd., Charlotte, N. C.; John C. Turner, P. O. Box 916, Atlanta 1, Ga.; for Georgia and Alabama, Matthews Equipment Co., 93-A Broadway, Providence, R. I., for New England and Canada.

**TIDE WATER ASSOCIATED OIL CO.**, 17 Battery Place, New York, N. Y. S. E. Dist. Office: 1122 S. Blvd., Charlotte 3, N. C.; K. M. Slocum, Dist. Mgr., Charlotte 2-3063.

**U S BOBBIN & SHUTTLE CO.**, Lawrence, Mass. Sou. Plants, Greenville, S. C.; Johnson City, Tenn. Sou. Reprs.: E. Rowell Holt, 208 Johnston Bldg., Charlotte, N. C.; M. Ousley, P. O. Box 816, Greenville, S. C.; D. C. Ragan, High Point, N. C.; A. D. Roper, Johnson City, Tenn.

**U. S. RING TRAVELER CO.**, 159 Aborn St., Providence, R. I. Sou. Reprs.: William W. Vaughan and Wm. H. Rose, P. O. Box 792, Greenville, S. C.; Oliver B. Land, P. O. Box 158, Athens, Ga.; Torrence L. Maynard, P. O. Box 456, Belmont, N. C.; Harold R. Fisher, P. O. Box 83, Concord, N. C.

**UNIVERSAL WINDING CO.**, Providence, R. I. Sou. Offices, 819 Johnston Bldg., Charlotte, N. C. Agts.: I. E. Wynne and R. M. Mauldin; 903 Norris Bldg., Atlanta, Ga., Acting Agt., I. E. Wynne.

**VALENTINE & CO., J. W.**, New York City. Sou. Rep.: T. Holt Haywood, 62 S. Main St., Winston-Salem, N. C.

**VEEDER-ROOT, INC.**, Hartford, Conn. Sou. Office, Room 231, W. Washington St., Greenville, S. C.; Robt. W. Bailey, Sou. Sales Mgr.

**VICTOR RING TRAVELER CO.**, Providence, R. I., with Sou. Office and Stock Room at 173 W. Franklin Ave., P. O. Box 842, Gastonia, N. C. Also W. L. Hudson, Box 1313, Columbus, Ga.

**VIRGINIA SMELTING CO.**, West Norfolk, Va.

**WAK INDUSTRIES**, Charlotte, N. C.

**WALKER MFG. CO., INC.**, Philadelphia, Pa. Sou. Rep.: R. T. Osteen, Sou. Mgr., 11 Perry Road, Phone Greenville 1869, Greenville, S. C. Greenville Textile Supply Co., Greenville, S. C.; Odell Mill Supply Co., Greensboro, N. C.; A. A. ("Red") Brame, 607 Northridge St., Greensboro, N. C.; D. B. Dorman, Box 66, Station C, Atlanta, Ga.

**WARWICK CHEMICAL CO.**, W. Warwick, R. I. Sou. Branch Factory at Rock Hill, S. C. Sou. Reprs.: M. M. McCann, Box 825, Burlington, N. C.; Henry Papini, 806 Mills Ave., Greenville, S. C.; W. E. H. Searcy, III, Box 123, Griffin, Ga.

**WATER TANK SERVICE CO.**, Commercial Bank Bldg., Charlotte, N. C.; Republic Bank Building, Dallas, Tex.; 215 Union Ave., Memphis, Tenn.

**WATSON & DESMOND**, 118½ W. Fourth St., Charlotte, N. C. Clifton E. Watson and S. P. V. Desmond, P. O. Box 1954, Charlotte, N. C. Sou. Reprs.: Walter F. Daboll, 703 Jefferson Bldg., Greensboro, N. C.; John W. Littlefield, 810 Woodside Bldg., Greenville, S. C.

**WATSON-WILLIAMS MFG. CO.**, Millbury, Mass. Sou. Reprs.: W. F. Daboll, 703 Jefferson Bldg., Greensboro, N. C.; John W. Littlefield, 810 Woodside Bldg., Greenville, S. C.

**WHEELER REFLECTOR CO., INC.**, 275 Congress St., Boston 10, Mass. Sou. Reprs.: Ernest Hall, 901-A Sul Ross St., Houston, Tex.; Marshall Whitman, Bona Allen Bldg., Atlanta, Ga.; R. T. Hardy, 1012 Garfield Ave., Palmyra, N. J.

**WHITEHEAD MACHINERY CO.**, TROY, P. O. Box 1245, Charlotte, N. C. Phone 3-9831.

**WHITIN MACHINE WORKS**, Whitinsville, Mass. Sou. Office, Whitin Bldg., Charlotte, N. C.; W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reprs.: M. J. Bentley and B. B. Peacock; Atlanta Office, 1317 Healey Bldg.

**WHITINSVILLE SPINNING RING CO.**, Whitinsville, Mass.

**WOLF, JACQUES & CO.**, Passaic, N. J. Sou. Reprs.: C. R. Bruning, 302 N. Ridgeway Drive, Greensboro, N. C.; G. W. Searell, R. No. 18, Knoxville, Tenn.



## J. E. SIRRINE & CO.

GREENVILLE • SOUTH CAROLINA



*Engineers*  
ESTABLISHED 1908

TEXTILE MILLS • RAYON PLANTS • KNITTING MILLS • DYE HOUSES  
BLEACHERIES • STEAM UTILIZATION • STEAM POWER PLANTS  
WATER • WASTE DISPOSAL • APPRAISALS • PLANS • REPORTS

## BARNES TEXTILE ASSOCIATES, Inc.

☆ CONSULTING ENGINEERS TO THE  
TEXTILE INDUSTRY FOR OVER 30 YEARS

OPERATING METHODS  
MECHANICAL SURVEY  
COST METHODS

PRACTICAL BUDGETS  
CREATIVE COUNSEL  
SPECIAL PROBLEMS

10 High Street - Boston, Mass.  
318 Montgomery Bldg. - Spartanburg, S. C.

## TEXTILE FINISHES

For Cotton, Rayons and  
Mixtures

TEXTILE OILS  
HEAVY CHEMICALS

★ Charlotte Chemical Laboratories, Inc.  
CHARLOTTE, NORTH CAROLINA

Founded 1914

## QUALITY SHUTTLES of WATSON-WILLIAMS

have led the field for 116 years.

Count on our representatives to help you solve your shuttle  
problems and to fill your shuttle needs.

Southern Representatives:

WATSON and DESMOND, Clifton E. Watson and S. P. V. Desmond,  
118½ West Fourth St., Charlotte, N. C., John W. LITTLEFIELD,  
810 Woodside Bldg., Greenville, S. C., Walter F. DABOLL, 703  
Jefferson Bldg., Greensboro, N. C.

WATSON-WILLIAMS MFG. CO. Millbury, Mass.

## PACKAGE DYEING AND BLEACHING

ALL TYPE COLORS  
ON COTTON YARNS

PIEDMONT PROCESSING CO., Belmont, N. C.

## Pepperton Cotton Mills

JACKSON, GEORGIA

Selling Agent:  
J. W. VALENTINE CO.  
40 WORTH ST., NEW YORK



## Craftsmanship

In this age of mass  
production, the beauty  
of old-time craftsman-  
ship is still prevalent in  
the wide variety of pile  
fabrics made by

*The Shelton Looms*

OWNED AND OPERATED BY

Sidney Blumenthal & Co. Inc.

One Park Avenue New York



# Classified Department

## Southern Standard Mill Supply Co.

NEW, REBUILT and USED TEXTILE MACHINERY and SUPPLIES

512 W. Fourth Street  
Charlotte, N. C.  
Phone 3-8841

1064-90 Main St., Pawtucket, R. I.

N. Y. Office: 1022 Empire State Bldg.

## C. E. LUTTRELL & COMPANY

**Textile Machinery and Supplies**

GREENVILLE, SOUTH CAROLINA

### Attention Cotton Spinning Mills

Manufacturer of Knitted Fabrics can offer attractive profitable proposition to spinners of carded and combed cotton yarns. Can arrange for permanent vertical set-up to merchandise cotton products which will be sold direct to ultimate consumer.

"BOX N-K," CARE TEXTILE BULLETIN

P. O. Box 1225, Charlotte 1, N. C.

### FOR SALE

- 2—Amoskeag 90"x48" Tenters, Butterworth #00 Brass Clips.
- 1—Textile 60"x50" Tenter, Top Opening Brass Clips.
- 1—Butterworth 30"x46" Tenter, Side Opening Brass Clips.
- 1—Winsor & Jerauld 30"x50" Tenter, Stainless Steel Clips.
- 2—Butterworth 90' Tenter Chains, #00 Top Opening, Brass Gates, Plates and Inserts.
- 1—Alexander & Garsed 5 Bowl 43" Plain Rolling Calendar.
- 1—Vertical set of 21 Copper Dry Cans, 23x101" Face.
- 1—Horizontal set of 22 Copper Dry Cans, 23x105" Face.
- 1—Horizontal set of 30 Copper Dry Cans, 23x48" Face.
- 1—Noble & Wood 50# Experimental Pulp Beater.
- 1—Curtis & Marble 66" Disc Dewatering or Dampening Machine.
- 1—Simpson 50"—2 Wood Roll Batcher with Cutter.
- 3—Morton Raw Stock Dyeing Machines, 1—50 lb., 2—1000 lb.
- 1—Sargent 96" wide x 50' long Raw Stock Dryer, Feeder.
- 2—Cast Iron Size Kettles, 42"x42"—42"x48".
- 1—Dye Padder, 50" Face, Rubber and Brass Rolls.
- 1—Rubber Covered Mangle Roll—13½"x65" Face.
- 1—Rope Squeezer—2 Rubber Rolls 18"x14" Face.
- 1—Indigo Long Chain Yarn Dyeing Range.
- 1—Butterworth 50" 3 Roll Water Mangle—2 Husk—1 Brass Roll.

### JAMES E. FITZGERALD

TEXTILE MACHINERY

10 Purchase Street Telephones 8-5616 and 8-5617 Fall River, Mass.

((LIST YOUR SURPLUS FINISHING MACHINERY WITH US!))

## BIG BELTS OR LITTLE



We make and repair  
both big and little  
belts, quickly, eco-  
nomically and exactly.

## GREENVILLE BELTING CO.

Manufacturers of Leather Belting

Telephone 2218

OVERSEER OF WEAVING would consider going to South America or would accept weave room anywhere. I am now employed but would like to make a change. Can furnish good recommendation; age 40, sober and reliable. Address "South America," care Textile Bulletin, P. O. Box 1225, Charlotte, N. C.

WANTED—Position as Spinner or Carder and Spinner. Would consider Assistant Superintendent. Long experience in both; strictly sober; good habits; married. Can come on short notice; will go anywhere. Write "Spinner-Carder," care Textile Bulletin, P. O. Box 1225, Charlotte, N. C.

POSITION WANTED—Cotton classer and buyer desires position with mill as classer or buyer. Broad experience in buying, classing and warehousing. All kinds of cottons. Write "Classer," care Textile Bulletin, P. O. Box 1225, Charlotte, N. C.

WANTED — Position as Superintendent of Yarn Twine or Weaving Mill. Age 38; sober and dependable. Address "Dependable," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—Position as Overseer of Carding or Section Hand; several years' experience as Overseer and Assistant Overseer. Completed I.C.S. Course. Can make any change in card room. Address "A. C. C.," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

WANTED—Job as Overseer of Spinning, Twisting, Spooling and Winding. Good production man; can get along with help, and can give best of references. Available at once. Harvey D. Wright, Maxton, N. C.

P. O. Box 1225, Charlotte 1, N. C.

WANTED—Job as second hand or head loom fixer on automatic box or Draper dobbies or plain looms. Have years experience; can give reference. Now foreman. For personal reasons wish to make a change. Write "Foreman," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

SUPERINTENDENT, Carder and Spinner's services offered; age 45; married; practical textile graduate. Specialize on strength, cost on carded, combed yarns, plain and fancy weaves. References. Interview. Write "M-G," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

### SUBJECT TO PRIOR SALE

- 12—7 x 3's Saco-Lowell Speeders, 168 Spindles each.
- 14—8 x 3½ Saco-Lowell Speeders, 160 Spindles each.
- 16—10 x 5's Saco & Pettee, 100 Spindles each.
- 5—Saco & Pettee Slubbers, 72 Spindles each.
- 17—Saco & Pettee Speeders, 8 x 3½, 152 Spindles each.

J. S. CHRISTOPHER  
148 Hall Street  
Spartanburg, S. C.



## Personnell Director Wanted

for chain of mills near Charlotte. Give age, education and experience, also salary expected.

Address "Personnel,"  
care Textile Bulletin,

P. O. Box 1225, Charlotte 1, N. C.

## WANTED

Position as Second Hand or Overseer of Weaving. Now employed as temporary second hand but desire change for better position; taking I. C. S. course; experienced on all new type looms, Draper dobbies and C. & K.; 12 years in ence and qualifications in first letter. All replies children; good references.

Write "Weaving" care Textile Bulletin,  
P. O. Box 1225, Charlotte 1, N. C.

## Opening for Mill Manager

Long established North Carolina mill having significant Jacquard Weaving unit as well as spinning, requires executive general manager in charge of production and merchandising finishers products. Give full particulars as to experience and qualification in first letter. All replies treated in strict confidence.

Address "Mill Manager,"  
care Textile Bulletin,

P. O. Box 1225, Charlotte 1, N. C.

## Textile Industrial Engineer Available

Textile Industrial Engineer Available  
Production management, cost accounting, job analysis, personnel problems, technical supervision on speeds, drafts and styling.

Write "T. I. E.," care Textile Bulletin,  
P. O. Box 1225, Charlotte 1, N. C.

## PERFEX FIBRE BROOMS

are modern.  
Tests, trials, eliminations, experiments, planned efforts have been put into making them.  
Continued co-operation with Batson will put the right fibre broom in every department.

BATSON

Box 841 Greenville, S. C.

## WANTED

Four spindle plumbers and two card room overhaulers. Must be sober and reliable. Top pay; permanent work.

Contact Mr. J. W. Norman,  
319 S. Broad, Monroe, Ga.  
Tel. No. 3866.

## WANTED TO BUY

Small yarn mill equipped to make 6/1 and 14/1, single. Please write fully describing what you have to sell.

Write "Buyer," care Textile Bulletin,  
P. O. Box 1225, Charlotte 1, N. C.

## FOR SALE

Maple trees, eighteen wide-leaf maple trees, 7 ft., at \$1.50 each; 4 for \$5.00. Seventy-five two-year-old, 5 ft., at \$1.00 each; six for \$5.00. Can ship at once.

B. D. BUNN,  
Oxford, N. C.

## WANTED TO LEASE

Small yarn mill equipped to make 30's two-ply. Give full details of what you have.

Write "Lease," care Textile Bulletin,  
P. O. Box 1225, Charlotte 1, N. C.

PAUL B. EATON  
Patent Attorney

1205 Johnston Bldg., Charlotte, N. C.  
514 Munsey Bldg., Washington, D. C.

Former Member Examining Corps  
U. S. Patent Office

## FOR SALE

Pansy plants, Steele's jumbo, mixed colors, blooming size. Dozen, 50 cents; 3 dozen, \$1.00; 100, \$3.00. Steele's Super Swiss Mastoden, dozen, 35 cents; 4 dozen, \$1.00; 100, \$2.00. Snapdragons, Carnations, Delphinium, 50 cents dozen. All plants postpaid.

PEACOCK'S NURSERY,  
Care L. T. Peacock, Parkton, N. C.

## WANTED

To buy, lease (or purchase the output), cotton carding equipment producing 10 to 20 thousand pounds weekly suitable for spinning into coarse count cotton yarns.

Write "K. K.," care Textile Bulletin,  
P. O. Box 1225, Charlotte 1, N. C.

## FOR SALE

Two Lowell 12 x 6 Slubbers. These machines are in excellent condition and can be seen on mill floor.

Write Summerville Manufacturing Co.,  
Summerville, Ga.

## ATTENTION DESIGNERS

Complete Designing Equipment. "Micro Analyzer," Pick Glass-Grain Scale, etc. One-half price.

Write I. A. Campbell, 1111 Harding Place,  
Charlotte, N. C., for details.

## WANTED

American company with cotton mills in South America requires assistant overseers of carding and spinning, also assistant overseers of weaving. Must be practical men, thoroughly familiar with machine operations and fixing. Write full details.

Care Box 286, New York 8, N. Y.

## FACTORY SITES

Within the railroad yard limits of Charlotte, 10 miles west of the center of the city, on both Seaboard and P. & N. Railways and on a strong stream, with plenty of stone for mill walls and dam, 120 acres for only \$14,000. Ideal for dye and finishing plants.

MARSH REALTY SALES, INC.  
Realtors 120 E. Fourth St. 3-7155.  
Half a block from your bank.

## For Best Results

Use

Textile Bulletin Want Ads

## JAMES E. FITZGERALD

SPECIALIZING IN THE PURCHASE AND SALE OF  
BLEACHING, DYEING AND FINISHING MACHINERY

10 PURCHASE STREET

FALL RIVER, MASS.

Tel. 8-5616

SURPLUS MACHINERY LISTS SOLICITED!

## We Have the Following Positions Open in Southern Mills

Overseer weaving and warping, automatic bobbin changing dobby looms.  
Braided rug superintendent.  
Cotton mill superintendent, 50,000 spindles.  
Purchasing agent.  
Overseer cotton spinning, \$80 per week.  
Jacquard loom fixer.

Also:

Assistant foreman silk throwing; also expert Crompton & Knowles rayon loom fixer for South America; superintendents and overseers for mills in foreign countries.

Charles P. Raymond Service, Inc.

294 Washington St. + Boston, Mass.  
OVER 45 YEARS IN BUSINESS

We Invite Correspondence (Confidential) With Men Seeking New Positions and With Employers Seeking Men



**A PUGILIST is no better  
than his HANDS**



**And a CARD is no better  
than its CLOTHING**

"Brittle hands" have been the downfall of many a good pugilist and poor card clothing (or the wrong type of clothing) has wrecked the efficiency of many a good card.

Ashworth service representatives are practical card men, specially trained to help you select the right clothing for the purpose.

If you so desire, they will also inspect your cards (including clothing, bearings and chains), free of charge, at regular intervals, and will recommend a repair program that will involve minimum expense and minimum loss of productive time.

*Write our nearest office for details.*

**ASHWORTH BROS., INC.**  
AMERICAN CARD CLOTHING CO. (Woolen Div.)

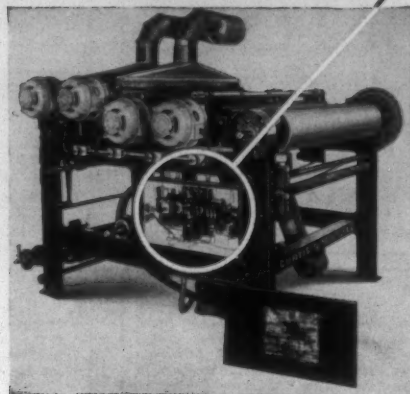
Fall River\*†† Worcester\*† Philadelphia\*†† Atlanta††  
Greenville†† Charlotte †† Dallas†† (Textile Sply. Co.)  
\*Factory †Repair Shop ††Distributing Point

**PRODUCTS AND SERVICES** — CARD CLOTHING FOR COTTON, WOOL, WORSTED, SILK, RAYON AND ASBESTOS CARDS AND FOR ALL TYPES OF NAPPING MACHINERY • BRUSHER CLOTHING AND CARD CLOTHING FOR SPECIAL PURPOSES • LICKERIN WIRE AND GARNET WIRE • SOLE DISTRIBUTORS FOR PLATT'S METALLIC WIRE • LICKERINS AND TOP FLATS RECLOTHED.



**3 FACTORIES... 6 REPAIR SHOPS... 7 DISTRIBUTING POINTS**

**—NEW ELECTRONIC—  
CONTROL—**



**for TYPE CMR AUTOMATIC SHEAR**

From the wonder science, Electronics, comes this remarkable timing device which is now included in the Automatic Seam Protector on Type CMR Shear. It is the latest of a series of improvements brought about to keep CMR Shear the most efficient machine for removing surface and selvage threads.

*Ask Us More About It!*



**TEXTILE SPECIALTIES**

McCaskie Wood Top	Loom Lays	Crank Arms
Rolls for Spinning	Race Boards	Parallel Blocks
Systems	Whip Rolls	Spools
Loom Beams	Dobby Cylinders	Shell Rolls
Cloth Rolls	Festoon Sticks	Wood Binders
Dobby Sheaves	Selvage Spools	Underclearers
Steaming Racks	Pin Boards	Shipping Rolls
Steaming Poles	Hi-Speed Section	Skewers
Lease Rods	Beams	Filling Boxes
Cones	Bottle Spools	Warp Cores
Temple Rolls	Castle Spools	Comber Rolls

■ ■ ■

**WILLIAM McCASKIE CO.**

SUCCESSOR TO WILLIAM McLEOD CO.

110 CHACE STREET

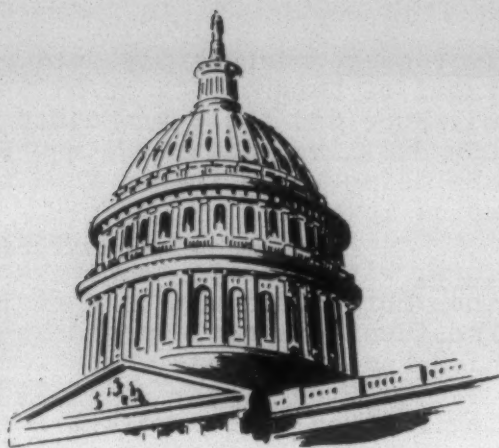
FALL RIVER, MASS.



# WATCHING

# WASHINGTON

[Exclusive and Timely News from the Nation's Capital]



A COALITION OF REPUBLICANS AND SOUTHERN DEMOCRATS, which is no more than a meeting of minds of responsible leaders on definite objectives for sound, constructive reconversion legislation, has taken over in the House of Representatives and is taking hold in the Senate. The program wholly scraps the Truman recommendations and the C.I.O.-sponsored projects. High on the list is overhauling and cutting down O.P.A., passing labor legislation on the Case Bill pattern, scrapping the 65 to 75-cent minimum wage proposal, throwing porkbarrel projects and deficit spending overboard, balancing the budget at about \$30 billion and clearing the way for possible tax revision.

The coalition is top-heavy in the House, with the edge exceedingly close in the Senate. Each group exchanges information with its counterpart. Important aspect in the Senate is that the Pepper-Wagner-Aiken-Morse group is blocked in the usual strategy of rushing through New Deal and C.I.O. proposals between the badly split ranks of Republicans and stalwart Democrats. The Administration is exerting strong pressure to stem the tide and is offering substantial concessions.

The House will do a slashing job on O.P.A. in granting only limited extension of price controls beyond June 30. The big fight will be on inclusion of farm labor costs in farm price computations. Bowles' wings will be clipped close; he will be able to flutter but not fly. The New Deal's hope of planned economy and prolonged industrial control will go out at the window.

The Administration is determined to resist a major overhauling of O.P.A. and will probably suffer a major defeat on this front. Congress is adamant against prolonging existing administrative abuses. Bowles overplayed his hand in talking tough, and he will be curbed, along with inflation and deficit spending. In price control extension he will work by strictly fixed standards.

In all essentials, the Bowles policy still remains one of tightening up on prices while liberalizing wages. Policy adds up to this: employers subject to price control will try to bargain on wage increases within the framework of stabilization to protect themselves from price-cost consequences, with prior approval of wage increases required for future price consideration except where blanket approval has already been given.

Basic intent of O.P.A. is to starve off entertaining appeals for price relief. It's embarking on a special survey of 45 selected industries to determine new cost elements resulting from wage increases, and pending the outcome, not to consider applications for price review. The survey will run well into the summer, according to plan.

The President's plan for continued subsidies to cushion wage



increases under firmly held price controls will crack up in the refusal of Congress to grant them. First evidence of firm House resistance was the overwhelming rejection of a \$600 million subsidy for new dwellings in the Patman Housing Bill. House feels that subsidies are using taxes to pay wage increases against arbitrarily held down price levels.

Wrong guessing continues to be a part of White House procedure, with efforts to recover by tightening price controls, but making them more difficult as wage increases push against the ceilings. The President has not learned he's fighting inflation rather than deflation, and that wage increases also increase his troubles.

Congress is going to do something about strikes. The final legislation will parallel the Case Bill in most essentials, and will have plenty of teeth for dealing with strikes. Another three months probably will pass before strikes really taper off and major adjustments as made. The real change will come after June 30, under a revised and reshaped price control law. Business is expected to start picking up in May and gain real force in the late summer.

John Lewis is determined to throw his weight around for publicity and political effect. His demands will include a \$3 a day over-all pay increase per man, and a ten-cent per ton royalty for "miners' insurance and hospitalization." On 60,000,000 bituminous tons per year, this would be a sizable war chest. The pending "Petrillo Bill" in Congress, if passed, will outlay royalty payments.

Uneasiness is spreading through the ranks of high labor leadership in Washington. "Obstinacy" of Congress is causing concern. It's felt the Administration has made a botch of "holding the line," and that Bowles' superficial thinking has clouded things. Some leaders are waking up that wage increases do mean higher prices, and that that net position of workers, with time lost on strikes, is no better or worse than before.

The Senate believes there should be a policy defining fair administrative procedure and has passed a bill to that end. Jurisdiction of the courts is clearly defined and persons affected by administrative orders have the means of knowing what their rights are and how to protect them. Public officials are provided with a simple formula in making administrative determinations.

There will be no further talk of tax cuts in authoritative quarters for some time. Congress went on a big spending spree after the September tax cut, and tax committees are determined not to consider further revision until the appropriation bills are passed and the over-all ceiling for the next fiscal year is firmly nailed down. However, some Administration officials are showing concern over the effect of steep individual surtax rates on business incentive, feeling that business expansion is being discouraged. Additions to income in the high brackets nearly all go into taxes. If the budget can be held to \$30 billion for 1947, a cut in individual rates is in sight late this year.

Unions are moving fast to capitalize the pay increases by launching new nationwide organizing drives. Both the A.F.L. and C.I.O. are eyeing the Southern states; C.I.O. will try to capitalize its recent textile wage gains in New England by offering similar rises to Southern textile workers. The chief selling argument of both groups will be promises of higher wages; A.F.L. claiming "sound, conservative leadership," and C.I.O. exploiting claim of "close Administration relations." The drive will be well under way in another two months.

Ranks of unemployed due to shortages of materials caused by strikes are growing fast, and causing Administration uneasiness. Thousands of salesmen are temporarily idle.



## DARY RING TRAVELERS



### BIT PLAYER HAS STAR ROLE

On the ring traveler depends fibre and eventually fabric quality . . . It must be designed to do justice to its star role in the spinning and twisting processes. Dary Ring Travelers are. See your Dary representative now!



### THE DARY RING TRAVELER COMPANY TAUNTON, MASSACHUSETTS

SYMBOL OF SUPERIORITY  
JOHN E. HUMPHRIES, BOX 843, GREENVILLE, S. C.  
JOHN H. O'NEILL, BOX 720, ATLANTA, GA.  
H. REID LOCKMAN, BOX 515, SPARTANBURG, S. C.

COOLING — VENTILATING

MOISTENING — HEATING

HUMIDIFYING INSTALLATIONS

ENGINEERING AND SERVICE

## INDUSTRIAL COOLING & MOISTENING CO., INC.

PHONE 7719 - - - - - CHARLOTTE, N. C.

## GENERAL MILL REPAIRS Repair Steel Rolls, Flyers and Spindles

Flutes on steel rolls raised and sized to original diameter  
METHOD OF RAISING FLUTES PATENTED, NO. 1,887,510

*Give us a trial*

C. E. HONEYCUTT

## GASTONIA ROLLER, FLYER & SPINDLE CO.

1337 West Second Avenue + Gastonia, North Carolina



DYE-BATH

ASSISTANT

Wetting Agent . . . Dyeing Assistant . . . Water  
Normalizer . . . Produces Brighter Shades . . .  
For All Fabrics.

Effective in hard water, acid or alkaline baths.

**BURKART-SCHIER CHEMICAL CO.  
CHATTANOOGA, TENNESSEE**

## MOUNT HOPE CLOTH HANDLING DEVICES for the Finishing Plant

**SWING GUIDERS**—for opening cloth from the rope and for guiding open width cloth. Purely mechanical, only two moving parts, wide adaptability, positive but gentle control, may be adjusted while in operation, waterproof.

**"FREE-WHEELING" EXPANDER**—for use in front of nips on calenders, dry cans, dye pads, mangles, quetches, dye jigs, mercerizing machines, open soapers, etc. Ball bearing mounted—produces maximum width with minimum warp tension. Easy to clean.

**DRAW ROLLS AND PLAITERS**—for pulling cloth through guiders, when opening goods from rope.

**TILTING ROLL WEFT STRAIGHTENER**, push button operated, or automatic operated when supplied with a General Electric Photo-Electric Control.

**CONTINUOUS ROLL FEEDS** — for keeping machines producing while new rolls are sewed on: printing machines, back fillers, tenter frames, dyeing machines, and all roll fed machines.

## MOUNT HOPE MACHINERY COMPANY

42-B Adams Street, Taunton, Massachusetts

*Southern Agent*

Slaughter Machinery Co., Charlotte 1, N. C.



SYNTHETIC DETERGENT

A low cost synthetic organic compound of exceptionally high detergent value. Effective in hard water, acid, or alkaline baths.

**BURKART-SCHIER CHEMICAL CO.  
CHATTANOOGA, TENNESSEE**

## Johnson Chemical Company



CHARLOTTE, N. C.

**DDT**

Licensed manufacturers and suppliers of 5% DDT  
in industrial quantities. Immediate shipment.

MANUFACTURING CHEMISTS  
TELEPHONE 6450 P. O. BOX 1418



## Index to Advertisers

[illegible]



# A.P.T.

YARN CARRIERS

IDENTIFIED WITH PROGRESS

## the GIANT package mule



WHEREVER you find progress in the spinning, twisting, or weaving of natural or synthetic fibres, there you also usually find A. P. T. Yarn Carriers.

An outstanding example of such a combination is the A. P. T. Bobbin and the GIANT Package Mule, developed by Johnson & Bassett. It is fair to say, we believe, that the A. P. T. Bobbin was one of the things that made the GIANT Package Mule so successful. It was the ONLY Yarn carrier

that met all the requirements:—a long thin barrel, perfect balance, light weight, large capacity, perfect spindle cling, resiliency, freedom from splintering, chipping, and splitting, and great resistance to distortion from changes in temperature and humidity.

A. P. T. Yarn Carriers are adaptable to many different operations in the processing of all types of fibres. Why not find out how they can be used to advantage in your mill?

## AMERICAN PAPER TUBE COMPANY

ESTABLISHED 1898

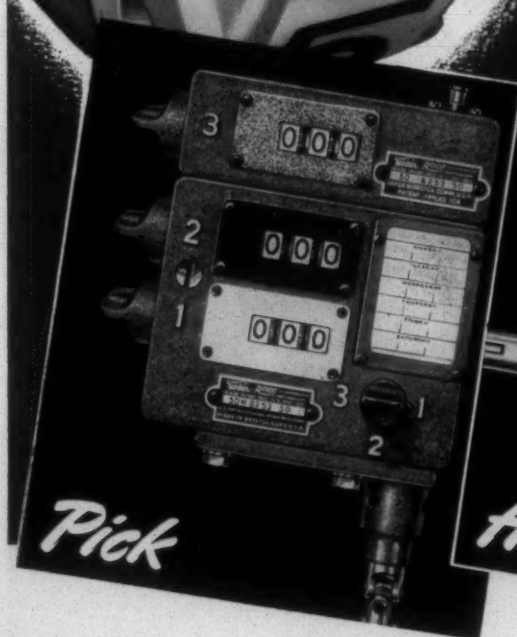
WOONSOCKET, R. I., U. S. A.

Sales Representatives: Jesse Hodges, P. O. Box 784, Charlotte, N. C.; James L. Coffield, Jr., 360 North Michigan Ave., Chicago, Ill.; W. J. Westaway Co., Ltd., Hamilton, Ont., Canada.



# COUNTROL

The Inner-Locking Wheel  
that's designed to  
PREVENT OVERTHROWING  
in all Veeder-Root  
**2-3 COUNTERS**



This new design is really a *wheel within a wheel*. And when the inner and outer wheels click into the locked-together position . . . then you have the greatest protection you can get against mechanical overthrowing.

This new protection is available only on Veeder-Root Pick, Hank, Yardage and Knitting Counters of the 2-3 type. And it's new proof that you can count on Veeder-Root to develop . . . first . . . the important advances in production

Control for modern-minded textile mills. Ask your Veeder-Root Field Engineer . . . or write the nearest Veeder-Root office . . . for full details on the new Inner-Locking Wheel.

*The Counting House of Industry*



**VEEDER-ROOT INC.**

Hartford 2, Connecticut

In Canada: Veeder-Root of Canada, Ltd., Montreal  
In England: Veeder-Root Ltd. (New address on request)